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7. IT-T2-04323

NASA-CR-167700

A Joint Program for
Agriculture and
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6. JUNE 1982

MISSING OBSERVATIONS IN MULTIYEAR ROTATION SAMPLING DESIGNS

(E83-10022) MISSING OBSERVATIONS IN
MULTIYEAR ROTATION SAMPLING DESIGNS (Texas
A&M Univ.) 125 p HC A06/MF A01 CSCI 02C

N83-12505

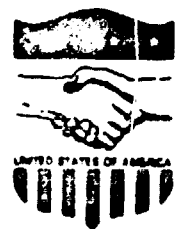
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5. NASA-14689



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TECHNICAL REPORT 22

Missing Observations in Multiyear Rotation Sampling Designs

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December 1981

TABLE OF CONTENTS

1.	Introduction	1
2.	Non-Replaced Segment Losses	3
3.	Conclusions for Non-Replaced Segment Losses	5
4.	Replacement Strategies	10
5.	Conclusions for Replacement Strategy I	13
6.	Recommendations	21
	Appendix 1	24
	Appendix 2	29
	Appendix 3	69
	Appendix 4	76

ABSTRACT

Multiyear estimation of at-harvest stratum crop proportions has been shown previously to be more efficient than single year estimation. In this report, the behavior of multiyear estimators in the presence of missing acquisitions is studied. Only the (worst) case when a segment proportion cannot be estimated for the entire year is considered. The effect of these missing segments on the variance of the at-harvest stratum crop proportion estimator is considered when (i) missing segments are not replaced, (ii) missing segments are replaced by segments not sampled in previous years.

The principle recommendations from this study are (1) to replace missing segments according to some specified strategy and (2) to use a sequential procedure for selecting a sampling design ; i.e., choose an optimal two year design and then, based on the observed two year design after segment losses have been taken into account, choose the best possible three year design having the observed two year parent design.

Missing Observations in Multiyear Rotation Sampling Designs

1. Introduction

Previous work (c.f., Technical Reports 18 and 19) has shown that multiyear estimation produces crop proportion estimates which are more efficient than single year estimators. Reductions in the variance of the estimated at-harvest acreage can exceed 30% for two and three year designs. These results, however, are based on the availability of estimated segment proportions for each sampled segment in each "season". Since cloud cover, mechanical malfunctions, registration problems, etc. will in practice make some estimated proportions unavailable in some seasons, it is necessary to determine the effect of missing segment observations on the efficiency of multiyear rotation designs.

Missing acquisitions can lead to one of the following three situations.

(i) Individual acquisitions are missing but a sufficient number are available to produce the required segment proportion estimates for each season. The quality of the estimates may be reduced.

(ii) The pattern of missing acquisitions precludes some but not all season estimates. For example, cloud cover may make an early season estimate impossible but mid and late season estimates can be produced.

(iii) The pattern of missing acquisitions is such that segment proportion estimates are unavailable for the entire year.

From the sampling design standpoint, situation (iii) is the worst possible case and will be the only one dealt with in this report.

The basic analysis of variance mixed model being considered is given matrix form by

$$Y = X \begin{bmatrix} \alpha \\ \delta \end{bmatrix} + JB + Ie ,$$

where Y = vector of transformed segment proportions ,

α = vector of (fixed) year effects ,

δ = vector of (fixed) systematic season biases ,

B = vector of (random) segment effects ,

X = fixed effects design matrix ,

U = random effects design matrix ,

e = vector of errors.

Since the variance of the transformed proportion is a function of the true segment proportion , a weighted least squares estimation procedure is used. Details concerning this model and the following remarks on parameter estimation can be found in Technical Reports 18 and 20.

Primary interest centers about the estimation of α_T and $\text{var}(\hat{\alpha}_T)$ since the estimated at-harvest stratum proportion for the current year T is given by $\hat{P}_T = y^{-1}(\hat{\alpha}_T)$. The variance of $\hat{\alpha}_T$, the estimated effect of the current year, is the $(T,T)^{\text{th}}$ entry in the matrix

$$(X' W' V^{-1} W X)^{-1} \sigma_e^2 ,$$

where W = matrix of weights ,

$\epsilon = We$ = vector of transformed errors,

$V = I + \gamma W U U' W' ,$

$\gamma = \sigma_b^2 / \sigma_e^2 .$

The choice of a good design reduces to choosing a design matrix U which minimizes $\text{var}(\hat{\alpha}_T)$.

For the unweighted model where W is the identity matrix, two and three rotation year designs can be characterized by a sequence of non-negative integers $\lambda = [\lambda_1, \lambda_2, \dots, \lambda_7]$, where

- λ_1 = number of segments used in first year only ,
- λ_2 = number of segments used in first and second years only ,
- λ_3 = number of segments used in second year only
- λ_4 = number of segments used in first and third years only ,
- λ_5 = number of segments used in all three years ,
- λ_6 = number of segments used in second and third years only ,
- λ_7 = number of segments used in third year only.

For two year designs, we can abbreviate λ to $\lambda^* = [\lambda_1^*, \lambda_2^*, \lambda_3^*]$.

Numerous examples of rotation designs and their λ - sequences are given in Technical Report 18.

In Sections 2 and 3 we consider the effect of missing segment observations for the entire year. In Sections 4 and 5 we study one of many possible replacement strategies for the missing segments. Section 6 contains recommendations on the choice of a design based on the work in the previous sections.

2. Non-Replaced Segment Losses

In our study of the effect of missing segment proportion estimates for the entire year, we shall assume that the initial (complete) design has the same number of segments, R , in each year. In addition, the weight matrix W will be the identity matrix. We will consider segment losses only in the last year of the design. Since probabilities are not computed in this part of the study, these segment losses need not be independent. We shall assume that in the last year, lost segments which had not been sampled in any previous year will be replaced by a comparable new segment while

segments which had been sampled in previous years will not be replaced if they are lost. Thus, for two year designs, only λ_2^* -type segments can be missing, while for three year designs, λ_4 , λ_5 , and λ_6 -type segments can be missing. If all segments in the last year are missing, then $\text{var}(\hat{\alpha}_T)$ cannot be estimated. Thus, in what follows, we shall always retain at least one segment in the last year.

The effect of segment loss in the current (last) year will be measured by

$$C = C(\gamma, R, \lambda) = \frac{\text{var}(\hat{\alpha}_T)}{\sigma_\epsilon^2}.$$

The value of C is the coefficient of σ_ϵ^2 in the expression for $\text{var}(\hat{\alpha}_T)$. A small value of C indicates a good design.

All two and three year designs for selected numbers of segments per year, R , were enumerated. For each such design, all possible combinations of missing segments were generated and the value of C was computed for selected variance component ratios γ . The values of C are given in Appendices 1 and 2. The scope of each appendix is given in Table 1. The range of γ values includes

Table 1. Scope of Appendices 1 and 2

Appendix	Number of Years in the Design	R	γ
1	2	2,3,4,5	0.5,1,2,3,4,10,50,100
2	3	2,3,4	0.5,1,2,3,4,10,50,100

cases where the variation among segments, σ_b^2 , was smaller, equal to and greater than the weighted error variance σ_ϵ^2 . In these appendices, the number of segments lost is given rather than the percentage lost. Since we are dealing with very few segments per year, percentages would not be comparable for different values of R and conclusions concerning the effect for a range of percentages would generally be restricted to a single value of R .

3. Conclusions for Non-replaced Segment Losses

From the information contained in Appendix 1, the following conclusions were obtained for two year designs.

(i) For a fixed number of lost segments, as the variance component ratio γ increases, the effect of segment loss as measured by C becomes greater. Thus, as the variability among segments increases, the loss of a segment leads to a more pronounced increase in the estimate of $\text{var}(\hat{\alpha}_T)$.

(ii) For fixed γ , as the number of segments lost increases, C increases.

(iii) For a fixed γ and number of segments lost, as the amount of overlap (segments used in both years) in the complete design decreases, the value of C decreases. Thus, designs with a minimal amount of overlap would appear to be less affected by segment loss. However, the loss of only a portion of the overlap segments (λ_2^* - type segments) has a small effect relative to the large effect of losing all overlap segments. This holds even when the number of remaining segments (λ_3^* - type segments) is large. An example of this is shown in Table 2 for $R = 3$ and selected γ . The table entry is the value of C . The designs are shown in Figures 1 - 3. This latter observation indicates that a design with a large initial overlap would be preferable since there would very likely be overlap segments remaining after missing segments were accounted for. Thus, the choice of a design in the face of segment loss must be a compromise between these two conflicting conclusions. This need to compromise leads us to conclude that good two year designs are ones which contain a modest amount of overlap (λ_2^* - type segments). Such designs were also recommended in Technical Report 18 as being near optimal in terms of efficiency.

Table 2. Values of C for two year designs having R = 3.

λ^*	Number of Missing Segments	0.5	1.0	10.0	γ 100.0
030	0	0.389	0.556	3.556	33.556
	1	0.500	0.675	3.687	33.689
	2	0.800	1.000	4.048	34.055
121	0	0.366	0.496	2.755	25.257
	1	0.493	0.646	2.955	25.465
	2	1.000	1.500	10.500	100.500
212	0	0.362	0.481	2.328	20.337
	1	0.550	0.800	5.300	50.300

Figure 1 [#] Year			Figure 2 Year			Figure 3 Year		
Segment	1	2	Segment	1	2	Segment	1	2
1	X	*	1	X		1	X	
2	X	*	2	X	*	2	X	
3	X	X	3	X	*	3	X	*
			4		X	4		X
						5		X
$\lambda^* = (0, 3, 0)$			$\lambda^* = (1, 2, 1)$			$\lambda^* = (2, 1, 2)$		

From the information contained in Appendix 2, the following conclusions were obtained for three year designs.

(i) For a fixed total number of missing segments, as the variance component ratio γ increases, the effect of segment loss increases; i.e., C increases.

(ii) For a fixed γ , as the total number of segments lost increases, C increases.

These first two conclusions parallel those for two year designs and deal only with the total number of segments lost. It is important to know what

[#] An X indicates that the segment was observed in that year and a * indicates overlap segments which can be missing.

effect, if any, the pattern of missing segments has on the estimation of $\text{var}(\hat{\alpha}_T)$. To address this question, the following definition is needed.

Definition: A rotation design is said to be disconnected if the set of segments in any year consists entirely of segments which are observed in that year only.

This definition is a special case of a more general definition of connectedness in the experimental design literature. As examples, the designs in Figures 4 and 5 are disconnected while the design in Figure 6 is connected ($R = 3$).

In terms of λ - sequences, a rotation design is disconnected if and only if $\lambda_1 = R$ (equivalently, $\lambda_2 = \lambda_4 = \lambda_5 = 0$) or $\lambda_3 = R$ (equivalently, $\lambda_2 = \lambda_5 = \lambda_6 = 0$) or $\lambda_7 = R$ (equivalently, $\lambda_4 = \lambda_5 = \lambda_6 = 0$), where R is the number of segments observed in the corresponding year. For designs with missing segments, the equivalent characterizations are more useful in conjunction with Appendix 2 for determining disconnectedness since the λ - sequences for designs with missing segments are not explicitly given in their entirety. The necessary portions of the λ - sequence can be constructed by observing that the loss of a λ_4 - type segment in the third year increases the number of λ_1 - type segments by one. A similar relationship holds between λ_5 and λ_2 - type segments and between λ_6 and λ_3 - type segments. For example, for the design $\lambda = (0, 2, 0, 1, 0, 1, 1)$, if one λ_4 - type segment and one λ_6 - type segment are missing, then the resulting design has a λ - sequence $\lambda = (1, 2, 1, 0, 0, 0, 1)$, which indicates a disconnected design.

Figure 4				Figure 5				Figure 6			
Year				Year				Year			
Segment	1	2	3	Segment	1	2	3	Segment	1	2	3
1	X			1	X		X	1	X		
2	X			2	X		X	2	X		X
3	X			3	X		X	3	X		X
4		X	X	4		X		4		X	
5		X	X	5		X		5		X	
6		X	X	6		X		6		X	X

$\lambda = (3,0,0,0,0,3,0,)$
 $\lambda = (0,0,3,3,0,0,0)$
 $\lambda = (1,0,2,2,0,1,0)$

(iii) For a fixed total number of missing segments, the λ - category or categories from which the segments were lost (λ_4 , λ_5 , or λ_6) has very little effect on the value of C unless the lost segments produce a design which is disconnected. If a disconnected design results, it is common for the value of C to be nearly twice as large as the corresponding values of C when the same number of segments are removed without disconnecting the design. This result holds even when the number of remaining segments is large. This conclusion is illustrated in Table 3 for the design shown in Figure 6. The corresponding incomplete rotation designs are shown in Figures 7 - 10 (Note the changes in the λ - sequences.). The lesson to be learned from Table 3 is that the loss of one crucial segment can produce more damage than the loss of several less crucial segments in the current year.

Table 3. An illustration of the effect of disconnectedness on C.

Figure	Number of Missing Segments	Number Lost in			γ			
		λ_4	λ_5	λ_6	0.5	1.0	10.0	100.0
6	0	0	0	0	0.306	0.402	1.929	16.935
7	1	0	0	1	0.450	0.625	3.637	33.639
8	1	1	0	0	0.400	0.500	2.024	17.027
9	2	1	0	1	0.729	0.929	3.977	33.983
10	2	2	0	0	0.729	0.929	3.977	33.983

Figure 7

Segment	Year		
	1	2	3
1	X		
2	X		X
3	X		X
4		X	
5		X	
6		X	

$$\lambda = (1,0,3,2,0,0,0)$$

Figure 8

Segment	Year		
	1	2	3
1	X		
2	X		
3	X		X
4		X	
5		X	
6		X	X

$$\lambda = (2,0,2,1,0,1,0)$$

Figure 9

Segment	Year		
	1	2	3
1	X		
2	X		
3	X		X
4		X	
5		X	
6		X	

$$\lambda = (2,0,3,1,0,0,0)$$

Figure 10

Segment	Year		
	1	2	3
1	X		
2	X		
3	X		
4		X	
5		X	
6		X	X

$$\lambda = (3,0,2,0,0,1,0)$$

(iv) For a given number of segments per year R, each two year parent produces designs which are reasonably robust to segment loss provided that the missing segments do not produce a disconnected design.

(v) In light of the difficulties which result from a disconnected design, a good choice of a complete design would be one in which there is sufficient overlap so that the chance of having a disconnected design after lost segments have been accounted for is small. This recommendation is compatible with the choice of optimal or near optimal designs as determined by the efficiency considerations in Technical Report 18.

4. Replacement Strategies

There are many possible replacement strategies for missing segments which could be implemented. Several are outlined and discussed below for the case when segments are missing for the entire year.

(I) Replace any missing segment in the current year by a segment which has not been sampled in previous years; i.e., by a λ_3^* - type segment for two year designs and a λ_7 - type segment for three year designs.

(II) If possible, replace a missing segment by a segment which would not change the λ sequence of the design. If this is impossible, then replace it by a λ_3^* or λ_7 -type segment. For example, in the design shown in Figure 11, either segment 1 or segment 2 can be used in the third year as the λ_4 - type segment. Hence, if segment 2 is requested in the third year but proportion estimates cannot be made, then it would be replaced by segment 1. In contrast, the loss of segment 4 or 5 in the third year would necessitate the introduction of a new sixth segment into the design.

Figure 11

Segment	Year		
	1	2	3
1	X		
2	X		X
3	X	X	
4		X	X
5		X	X

$$\lambda = (1,1,0,1,0,2,0)$$

(III) Modify strategy II to allow for the replacement of a missing segment in the current year by any previously sampled segment which is not already allocated to the current year. If sufficient segments were not available as replacements, then λ_7 - type segments would be added. For this strategy, in the design in Figure 11, segments 1 and 3 could be used as replacements for

any of segments 2, 4, or 5 which were missing in the third year. A new segment would need to be added only if all three third year segments were missing.

The advantage of strategies such as II and III is that the modified designs are less likely to be disconnected than are those resulting from strategy I. It is clear from previous work that within strategy III, the use of some segments as replacements would result in better designs than for other available segments. The determination of the actual optimal replacement segment would be extremely complicated and would be best dealt with on a case by case basis when the need arises. The difficulty here is that the modified design can be any of the possible designs which arise from the parent design. In contrast, strategy I has the advantage of being simple to implement.

The preceding remarks deal exclusively with unweighted estimation where all segments within a λ - category are interchangeable. For weighted estimation, the loss of different segments within the same λ - category will have differing effects on the estimation of $\text{var}(\hat{\alpha}_T)$ and so cannot be treated as interchangeable. This further complicates strategies II and III and, in fact, the optimal segment replacement could only be determined by using knowledge of the particular segments sampled in previous years. For these reasons, we shall only discuss replacement strategy I.

In what follows, we shall be dealing with unweighted estimation only and segment loss will occur only in the last year of the design. We shall assume that segment losses are independent (in contrast to Section 2) and that the probability of loss for each segment is the same. Under these assumptions, the number of segments X_1 , missing of type λ_1 has a binomial distribution.

For three year designs, the joint distribution of (X_4, X_5, X_6) is the product of three independent binomial distributions each having the same probability of "success".

Comparisons of designs under this replacement strategy will be affected by computing

$$\bar{C} = \bar{C}(p, \gamma) = \sum_v f_v C_v,$$

where

$f_v = f_v(p)$ = probability that the v^{th} replacement design will be used,

p = probability that any one particular segment will be lost,

$C_v = C_v(\gamma)$ = value of C for the v^{th} replacement design for a given value of γ ,

and where the sum is taken over all possible replacement designs for the design under study. The design which results from applying the replacement strategy to the original design after the missing segments have been determined is referred to as the replacement design.

Thus, we are comparing weighted averages of possible C -values. Small values of \bar{C} indicate designs for which $\text{var}(\hat{\alpha}_T)$ will, on the average, be relatively small.

Values of \bar{C} were computed for all two and three year designs with the values of R and γ indicated in Table 1 and the probability p of segment loss being 0.1, 0.2, ..., 0.9. Appendix 3 contains the \bar{C} values for two year designs while the corresponding information for three year designs is in Appendix 4. Three year disconnected designs in which $\lambda_7 = R$ and two year disconnected designs were not considered since for these designs \bar{C} is independent of p . This follows from the fact that the only replacement design is the design itself.

5. Conclusions for Replacement Strategy I.

From the information contained in Appendix 3 the following conclusions were obtained concerning the behavior of two year designs under replacement strategy I .

(i) For a fixed probability of segment loss, p , as the variance component ratio γ increases, \bar{C} increases.

(ii) For a fixed number of segments per year, R , and a fixed γ , as p increases the number of segments sampled in both years (λ_2^* - type segments) for the best design (minimum \bar{C}) increases. This is consistent with previous results since, for a fixed design, increasing p will increase the probability that the replacement design will be disconnected, thereby contributing a large C - value with large probability to the calculation of \bar{C} .

Hence, for large segment loss probabilities p , a good design will have a large number of segments sampled in both years while for small p , a good design will have a minimal amount of overlap. As a result, the choice of an optimal or near optimal design under this replacement strategy requires some knowledge of the probability of segment loss. Near optimality may be obtained without precise knowledge of p .

(iii) As R increases, \bar{C} decreases for a fixed p and γ . Thus, an increase in the number of segments per year will, on the average, reduce $\text{var}(\hat{\alpha}_T)$.

(iv) For a given design and value of γ , \bar{C} is a polynomial in p of degree λ_2^* where the coefficients are functions of the C - values of the possible replacement designs. This follows from the fact that \bar{C} is a weighted average of C values where the weights are binomial probabilities in terms of p . These polynomials are not in general monotonic. For a

given γ , the value of \bar{C} may be large for values of p close to 0 and 1 but smaller for intermediate values of p . Such an example is given in Table 4 which contains the values of \bar{C} for the design $\lambda^* = (2, 3, 2)$. For this design, \bar{C} is a cubic polynomial in p .

Table 4. Values of \bar{C} for the design $\lambda^* = (2, 3, 2)$.

p	γ			
	0.5	1.0	10.0	100.0
0.1	0.218**	0.293	1.544	13.941
0.2	0.218*	0.292**	1.510	13.521
0.3	0.218*	0.293*	1.491	13.243*
0.4	0.219**	0.294*	1.490*	13.166*
0.5	0.221	0.297	1.512	13.346
0.6	0.222	0.302	1.563	13.842
0.7	0.224	0.307	1.645	14.711
0.8	0.227	0.314	1.765	16.011
0.9	0.230	0.323	1.926	17.799

* values of p and γ for which this design is optimal

** other designs are also optimal for this combination of p and γ

An intuitive interpretation of the behavior of \bar{C} in Table 4 is difficult at best. However, some light can be shed on its behavior by studying the C - values for possible replacement designs since the coefficients in the polynomial expression for \bar{C} are functions of these C - values. The C - values corresponding to the γ - values in Table 4 are given in Table 5.

Table 5. Values of C for possible replacement designs

associated with the design $\lambda^* = (2, 3, 2)$.

λ^* of Replacement Design			γ			
			0.5	1.0	10.0	100.0
2	3	2	0.218	0.294	1.587	14.445
3	2	3	0.217	0.288	1.433	12.686
4	1	4	0.221	0.296	1.360	11.377
5	0	5	0.233	0.333	2.133	20.133

For a given γ , \bar{C} is a weighted average of these C - values. As p increases, the probability that the replacement design will be the disconnected design $\lambda^* = (5, 0, 5)$ increases. Thus \bar{C} will increase. For intermediate values of p , more weight is placed on replacement designs with smaller C - values, thereby reducing \bar{C} .

The conclusion which can be drawn here reinforces that in (ii), viz., when the between segment variation is large (large γ), some knowledge of the probability of segment loss, p , is essential in determining a design which can be expected to perform well under this replacement strategy.

A list of optimal or near optimal two year designs under this replacement strategy is given in Table 6. A striking feature of this list is that every design which is not disconnected appears in it for some configuration of values of p and γ , again emphasizing the need for some knowledge of these parameters.

An indication of the range of values of \bar{C} for the optimal and near optimal designs in Table 6 for selected values of p and γ is given in Table 7. The format of this table has been rearranged so that the effect of changing R , the number of segments per year, is easily seen. It is important to realize that the design for each entry varies. Thus, for a given R , no single design can achieve the indicated values of \bar{C} for all p and γ .

From the information in Appendix 4, the following conclusions were obtained concerning the behavior of three year designs under replacement strategy I.

(i) For a fixed probability of segment loss p , the values of \bar{C} increase as the variance component ratio γ increases.

(ii) For a fixed γ , \bar{C} is a polynomial in p of degree $\lambda_4 + \lambda_5 + \lambda_6$ where the coefficients are functions of the C - values of the possible replacement designs. As a result, the behavior of \bar{C} for three year designs is similar to that described previously for two year designs.

Table 6. Optimal and near optimal two year designs.

R	λ^*	Range of parameters where design is optimal	
		P	γ
2	0 2 0	0.5 - 0.9	all
	1 1 1	0.1 - 0.5	all
3	0 3 0	0.6 - 0.9	all
	1 2 1	0.3 - 0.5	all
		0.1 - 0.2	0.5
	2 1 2	0.1 - 0.2	1.0 - 100.0
4	0 4 0	0.6 - 0.9	all
	1 3 1	0.5	all
	2 2 2	0.2 - 0.4	all
		0.1	0.5 - 3.0
	3 1 3	0.1	4.0 100.0
5	0 5 0	0.7 - 0.9	all
		0.6	0.5 - 3.0
	1 4 1	0.5	0.5 - 3.0
		0.6	4.0 - 100.0
	3 2 3	0.1	0.5 - 10.0
		0.2 - 0.3	all
	4 1 4	0.1	50.0 - 100.0

Table 7. Minimum values of \bar{C} for two year designs.

p	2	3	4	5
<u>$\gamma = 0.5$</u>				
0.1	0.546	0.366	0.272	0.220
0.3	0.554	0.366	0.276	0.220
0.6	0.564	0.372	0.276	0.220
0.9	0.576	0.381	0.284	0.230
<u>$\gamma = 1.0$</u>				
0.1	0.736	0.489	0.364	0.290
0.3	0.756	0.741	0.368	0.295
0.6	0.780	0.768	0.376	0.295
0.9	0.814	1.140	0.400	0.315
<u>$\gamma = 10.0$</u>				
0.1	3.912	2.451	1.804	1.425
0.3	4.228	2.649	1.876	1.465
0.6	4.576	2.796	1.952	1.530
0.9	5.050	3.237	2.348	1.825
<u>$\gamma = 100.0$</u>				
0.1	35.416	21.660	15.636	12.255
0.3	38.732	23.937	16.660	12.805
0.6	42.378	25.455	17.880	13.575
0.9	47.350	30.120	21.660	16.670

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(iii) As the number of segments sampled per year increases, \bar{C} generally decreases for a fixed p and γ . A few exceptional cases can be found. Thus it is advantageous to increase the number of segments sampled per year.

(iv) For a given two year parent design, as the probability of segment loss p increases, the minimum values of \bar{C} occur for designs with a decreasing number of new segments in the third year (λ_7 - type segments); i.e., an increasing number of segments sampled in previous years should be resampled in the third year. For a fixed value of λ_7 within a parent, designs having more segments sampled in all three years (λ_5 - type segments) have smaller values of \bar{C} .

(v) For a fixed R , each two year parent design will produce a three year design with reasonable (but not necessarily near optimal) values of \bar{C} . The best three year designs result from two year parents with a minimal amount of overlap (λ_2^* - type segments), which are not near optimal two year designs.

A list of optimal or near optimal three year designs is given in Table 8 for replacement strategy I. The final choice of a three year design from among those in Table 8 must take into account the performance of the two year parent design since at-harvest estimates will be required during each of the three years that the design is in use. Thus, disconnected two year parents should not be used even if they yield the smallest \bar{C} - value for a particular combination of p and γ in the third year. For example, in Table 8 for $R = 2$, the design $\lambda = (1, 0, 1, 1, 0, 1, 0)$ actually has smaller values of \bar{C} for $p \leq .3$ than does $\lambda = (1, 0, 1, 0, 1, 0, 1)$, but the difference is relatively small. Since the former design has a disconnected two year parent, the latter would be preferred in most cases.

In general, the value of γ does not seriously affect the optimality or near optimality of a particular design in Table 8.

Table 8. Optimal and near optimal three year designs.

R	λ	λ^*	Range of p
2	0011100	111	0.4 - 0.9
	1000110	111	0.4 - 0.9
	1011010	202#	0.1 - 0.3
	1010101	111	0.1 - 0.3
3	1011110	212	0.4 - 0.9
	1021101	212	0.1 - 0.3
	2010111	212	0.1 - 0.3
	2021011	303#	0.1
4	1122011	313	0.3 - 0.9
	2111021	313	0.3 - 0.9
	2022020	404#	0.2 - 0.9
	3020112	313	0.1 - 0.2
	3031012	404#	0.1

indicates disconnected two year parent.

An indication of the amount by which the value of \bar{C} varies for these near optimal designs in Table 8 for selected γ and p is shown in Table 9. As in Table 7, the format has been rearranged so that the effect of changing R, the number of segments sampled per year, is easily seen. It is important to realize that the designs which produce these values of \bar{C} vary with p and γ .

Table 9. Minimum values of \bar{C} for three year designs.

p	R		
	2	3	4
<u>$\gamma = 0.5$</u>			
0.1	0.468	0.309	0.228
0.3	0.480	0.312	0.232
0.6	0.494	0.324	0.240
0.9	0.517	0.342	0.256
<u>$\gamma = 1.0$</u>			
0.1	0.606	0.402	0.296
0.3	0.640	0.417	0.304
0.6	0.687	0.441	0.328
0.9	0.749	0.492	0.368
<u>$\gamma = 10.0$</u>			
0.1	3.034	1.832	1.332
0.3	3.429	2.025	1.420
0.6	3.906	2.247	1.656
0.9	4.843	3.063	2.296
<u>$\gamma = 100.0$</u>			
0.1	27.112	15.792	11.172
0.3	31.107	17.490	12.024
0.6	35.714	19.770	14.032
0.9	45.645	28.488	21.184

6. Recommendations

In this report we have studied, in effect, two strategies for dealing with segment loss: no replacement and replacement by new segments. The principal recommendation is that some replacement strategy should be used. The non-replacement of lost segments, for whatever reason, can be disastrous in many cases.

If the situation should arise where lost segments cannot be replaced, the following guidelines should be used in choosing a design.

(i) A two year design having a "moderate" number of segments sampled in both years should be chosen. "Moderate" must be interpreted in light of the likelihood that a segment will be lost. As this likelihood increases, the number of segments sampled in both years should increase. A design with complete rotation of segments should never be used. In extreme situations where large numbers of lost segments are almost certain, a no rotation design (the same segments sampled in both years) would be recommended. This should not be construed as a blanket recommendation for the no rotation design since it performs poorly from an efficiency viewpoint.

(ii) A three year design should be chosen which has a "large" proportion of the segments sampled in more than one year. The two year parent of the chosen design should follow recommendation (i). As in (i), the interpretation of "large" must be made in light of the likelihood of segment loss. Also as in (i), the no rotation design should be used only in extreme cases. It is generally not recommended.

The thrust of the above recommendations is to choose designs which avoid disconnectedness as well as possible subject to non-design considerations. The effect of estimating at-harvest stratum proportions from a disconnected design was illustrated in Table 3 but cases where the effect is much more dramatic can be found in Appendices 1 and 2.

The replacement strategy studied in Sections 4 and 5 is one of many which could be implemented. It was initially chosen for its simplicity. However, among the strategies mentioned in Section 4, it has the greatest tendency to produce a disconnected replacement design. In this sense, it represents a worst possible strategy; that is, the effect of segment loss should be more pronounced under strategy I than under strategies II and III.

The key to the following recommendations for design selection under strategy I is a preliminary knowledge of the probability of segment loss p and the variance component ratio γ . For near optimality, this knowledge need not be precise; a reasonably narrow range of possible parameter values will suffice.

(i) For two year designs the optimal or near optimal designs are given in Table 6. Although for some values of p and γ two year no-rotation designs are listed, if the design is to be extended beyond two years the fact that these designs produce offspring which, as a group, are not near-optimal must be considered.

(ii) For three year designs, the optimal or near optimal designs are given in Table 8. The selection of a design from this table must be tempered by the fact that the design must be used to produce at-harvest stratum proportion estimates at the end of each year. Thus, three year designs generated from a two year parent having no overlapping segments are not recommended when other designs are available.

It was noted in Section 5 that each two year parent produces several reasonable but not necessarily optimal three year designs. In view of this fact and the somewhat contradictory results in Tables 6 and 8, the following sequential procedure is recommended for choosing designs under replacement strategy I.

(iii) Choose an optimal two year design based on Table 6 and knowledge of the values of p and γ . At the end of the second year, use Appendix 4 to find an optimal or near optimal three year design for the two year parent design which has been observed. Because of segment loss, this observed parent may well differ from the design originally selected.

Although the three year design resulting from recommendation (iii) probably will not be among the optimal designs listed in Table 8, it should perform reasonably well for both the second and third years. The recommendation in (iii) is based on a preference for two reasonable estimates rather than a combination of one near optimal and one possibly poor estimate.

Appendix 1: Values of C for Two Year

Designs, R = 2, 3, 4, 5

The table entry is the value of

$$C = \frac{\text{var}(\hat{\alpha}_T)}{\sigma_c^2}$$

for the indicated value of γ and the indicated number of missing λ_2^* - type segments from the original design with the given λ^* -sequence (c.f., Section 2). The λ^* - sequence of the design with missing segments can be reconstructed from the λ^* - sequence of the original design by subtracting the number of missing segments from λ_2^* and adding it to λ_1^* . For example, if the original design were $\lambda^* = (1, 3, 1)$ and two segments were missing, the resulting design would be given by $\lambda^* = (3, 1, 1)$.

R = 2

LAMBDA STAR : 0 2 0

NO. MISSING	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0	0.583	0.833	1.333	3.00	4.00	5.333	25.333	50.333
1	0.906	1.181	1.698	2.206	2.709	5.717	25.721	50.722

LAMBDA STAR : 1 1 1

NO. MISSING	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0	0.542	0.724	1.071	3.00	4.00	3.754	17.091	33.759
1	1.056	1.556	2.556	1.410	1.747	10.556	50.556	100.556

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R = 3

LAMBDA STAR : 0 3 0

NO. MISSING	0.50	1.00	2.00	3.00	GAMMA	4.00	10.00	50.00	100.00
0	0.389	0.556	0.889	1.222	1.556	3.556	3.556	16.889	33.556
1	0.500	0.675	1.014	1.350	1.685	3.687	3.687	17.022	33.689
2	0.800	1.000	1.357	1.700	2.038	4.048	4.048	17.387	34.055

LAMBDA STAR : 1 2 1

NO. MISSING	0.50	1.00	2.00	3.00	GAMMA	4.00	10.00	50.00	100.00
0	0.366	0.496	0.751	1.002	1.253	2.755	2.755	12.757	25.257
1	0.493	0.646	0.922	1.184	1.440	2.955	2.955	12.964	25.465
2	1.000	1.500	2.500	3.500	4.500	10.500	10.500	50.500	100.500

LAMBDA STAR : 2 1 2

NO. MISSING	0.50	1.00	2.00	3.00	GAMMA	4.00	10.00	50.00	100.00
0	0.362	0.481	0.700	0.910	1.115	2.328	2.328	10.336	20.337
1	0.550	0.800	1.300	1.800	2.300	5.300	5.300	25.300	50.300

R = 4

LAMBDA STAR : 0 4 0									
NO. MISSING	0.50	1.00	2.00	3.00	GAMMA	4.00	10.00	50.00	100.00
0	0.292	0.417	0.667	0.917	1.167		2.667	12.667	25.167
1	0.348	0.477	0.730	0.981	1.232		2.733	12.734	25.234
2	0.453	0.590	0.849	1.103	1.355		2.858	12.861	25.361
3	0.742	0.904	1.181	1.442	1.697		3.209	13.215	25.716
LAMBDA STAR : 1 3 1									
NO. MISSING	0.50	1.00	2.00	3.00	GAMMA	4.00	10.00	50.00	100.00
0	0.277	0.380	0.582	0.783	0.984		2.185	10.185	20.185
1	0.338	0.448	0.656	0.860	1.062		2.266	10.268	20.268
2	0.463	0.600	0.834	1.051	1.260		2.481	10.494	20.496
3	0.967	1.467	2.467	3.467	4.467		10.467	50.467	100.467
LAMBDA STAR : 2 2 2									
NO. MISSING	0.50	1.00	2.00	3.00	GAMMA	4.00	10.00	50.00	100.00
0	0.271	0.362	0.535	0.705	0.873		1.877	8.546	16.879
1	0.343	0.453	0.647	0.828	1.004		2.023	8.703	17.038
2	0.528	0.778	1.278	1.778	2.278		5.278	25.278	50.278
LAMBDA STAR : 3 1 3									
NO. MISSING	0.50	1.00	2.00	3.00	GAMMA	4.00	10.00	50.00	100.00
0	0.274	0.365	0.530	0.684	0.834		1.708	7.434	14.578
1	0.373	0.540	0.873	1.206	1.540		3.540	16.873	33.540

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R = 5

LAMBDA STAR : 0 5 0

NO. MISSING	0.50	1.00	2.00	3.00	GAMMA	4.00	10.00	50.00	100.00
0	0.233	0.333	0.533	0.733	0.933	2.133	2.133	10.133	20.133
1	0.267	0.370	0.572	0.772	0.973	2.174	2.174	10.174	20.174
2	0.321	0.428	0.633	0.834	1.035	2.237	2.237	10.239	20.239
3	0.422	0.537	0.748	0.952	1.154	2.359	2.359	10.361	20.362
4	0.704	0.844	1.073	1.284	1.491	2.703	2.703	10.709	20.710

LAMBDA STAR : 1 4 1

NO. MISSING	0.50	1.00	2.00	3.00	GAMMA	4.00	10.00	50.00	100.00
0	0.224	0.309	0.477	0.644	0.811	1.812	1.812	8.479	16.812
1	0.259	0.348	0.519	0.687	0.855	1.857	1.857	8.524	16.858
2	0.318	0.415	0.593	0.765	0.934	1.940	1.940	8.610	16.944
3	0.442	0.568	0.776	0.963	1.142	2.167	2.167	8.850	17.186
4	0.944	1.444	2.444	3.444	4.444	10.444	10.444	50.444	100.444

LAMBDA STAR : 2 3 2

NO. MISSING	0.50	1.00	2.00	3.00	GAMMA	4.00	10.00	50.00	100.00
0	0.218	0.294	0.440	0.584	0.728	1.567	1.567	7.302	14.445
1	0.257	0.340	0.492	0.640	0.785	1.648	1.648	7.366	14.509
2	0.328	0.433	0.611	0.772	0.926	1.809	1.809	7.541	14.686
3	0.512	0.762	1.262	1.762	2.262	5.262	5.262	25.262	50.262

LAMBDA STAR : 3 2 3

NO. MISSING	0.50	1.00	2.00	3.00	GAMMA	4.00	10.00	50.00	100.00
0	0.217	0.288	0.421	0.550	0.678	1.433	1.433	6.436	12.686
1	0.263	0.351	0.504	0.645	0.780	1.553	1.553	6.569	12.822
2	0.361	0.528	0.861	1.194	1.528	3.528	3.528	16.861	33.528

LAMBDA STAR : 4 1 4

NO. MISSING	0.50	1.00	2.00	3.00	GAMMA	4.00	10.00	50.00	100.00
0	0.221	0.296	0.430	0.554	0.673	1.360	1.360	5.820	11.377
1	0.282	0.407	0.657	0.907	1.157	2.657	2.657	12.657	25.157

Appendix 2: Values of C for Three Year
Designs, R = 2, 3, 4.

The table entry is the value of

$$C = \frac{\text{var}(\hat{\alpha}_T)}{\sigma_\epsilon^2}$$

for the indicated value of γ and configuration of missing segments from the original design. The λ - sequence of the design with missing segments can be reconstructed from the λ - sequence of the original design. An example of such a reconstruction is given in Section 3. The three year designs are arranged according to their two year parent design. The value of SS is the number of segments in the parent design.

R = 2 SS = 2
 LAMBDA STAR : 0 2 0

LAMBDA : 0 0 0 2 0 0
 NO. MISSING NO. MISSING IN
 L4 L5 L6
 0 0 0 0
 1 0 1 0
 0.50 1.00 2.00 GAMMA
 3.00 10.00 50.00 100.00
 0.528 0.778 1.278 1.778 2.278 2.547 5.278 50.278
 0.779 1.038 1.544 2.046 2.547 5.549 25.550 50.550

LAMBDA : 0 1 0 0 1 0 1
 NO. MISSING NO. MISSING IN
 L4 L5 L6
 0 0 0 0
 1 0 1 0
 0.50 1.00 2.00 GAMMA
 3.00 10.00 50.00 100.00
 0.475 0.650 0.990 1.326 1.661 3.664 17.000 33.666
 0.967 1.467 2.467 3.467 4.467 10.467 50.467 100.467

LAMBDA : 0 2 0 0 0 0 2
 NO. MISSING NO. MISSING IN
 L4 L5 L6
 0 0 0 0
 0 0 0 0
 0.50 1.00 2.00 GAMMA
 3.00 10.00 50.00 100.00
 0.528 0.778 1.278 1.778 2.278 5.278 25.278 50.278

R = 2 SS = 3
 LAMBDA STAR : 1 1 1

LAMBDA : 0 0 1 1 1 0 0

NO. MISSING	NO. MISSING IN L4 L5 L6	0.50	1.00	2.00	GAHMA 3.00	4.00	10.00	50.00	100.00
0	0 0 0	0.486	0.666	1.011	1.349	1.685	3.690	17.027	33.694
1	0 1 0	0.802	1.030	1.417	1.774	2.121	4.149	17.499	34.168
1	1 0 0	0.736	0.921	1.267	1.605	1.940	3.945	17.281	33.948

LAMBDA : 0 1 0 1 0 1 0

NO. MISSING	NO. MISSING IN L4 L5 L6	0.50	1.00	2.00	GAHMA 3.00	4.00	10.00	50.00	100.00
0	0 0 0	0.470	0.641	0.978	1.312	1.646	3.647	16.981	33.648
1	0 0 1	0.802	1.030	1.417	1.774	2.121	4.149	17.499	34.168
1	1 0 0	0.802	1.030	1.417	1.774	2.121	4.149	17.499	34.168

LAMBDA : 1 0 0 0 1 1 0

NO. MISSING	NO. MISSING IN L4 L5 L6	0.50	1.00	2.00	GAHMA 3.00	4.00	10.00	50.00	100.00
0	0 0 0	0.486	0.666	1.011	1.349	1.685	3.690	17.027	33.694
1	0 0 1	0.736	0.921	1.267	1.605	1.940	3.945	17.281	33.948
1	0 1 0	0.802	1.030	1.417	1.774	2.121	4.149	17.499	34.168

LAMBDA : 0 1 1 1 0 0 1

NO. MISSING	NO. MISSING IN L4 L5 L6	0.50	1.00	2.00	GAHMA 3.00	4.00	10.00	50.00	100.00
0	0 0 0	0.482	0.647	0.939	1.211	1.474	3.003	13.022	25.525
1	1 0 0	0.967	1.467	2.467	3.467	4.467	10.467	50.467	100.467

LAMBDA : 1 0 1 0 1 0 1

NO. MISSING	NO. MISSING IN L4 L5 L6	0.50	1.00	2.00	GAUSS 3.00	4.00	10.00	50.00	100.00
0	0 0 0	0.461	0.606	0.874	1.132	1.386	2.896	12.901	25.402
1	0 1 0	0.967	1.467	2.467	3.467	4.467	10.467	50.467	100.467

LAMBDA : 1 1 0 0 0 1 1

NO. MISSING	NO. MISSING IN L4 L5 L6	0.50	1.00	2.00	GAUSS 3.00	4.00	10.00	50.00	100.00
0	0 0 0	0.482	0.647	0.939	1.211	1.474	3.003	13.022	25.525
1	0 0 1	0.967	1.467	2.467	3.467	4.467	10.467	50.467	100.467

LAMBDA : 1 1 1 0 0 0 2

NO. MISSING	NO. MISSING IN L4 L5 L6	0.50	1.00	2.00	GAUSS 3.00	4.00	10.00	50.00	100.00
0	0 0 0	0.528	0.778	1.278	1.778	2.278	5.278	25.278	50.278

R = 2 SS = 4
LAMBDA STAR : 2 0 2

[illegible]

LAMBDA :	1	0	1	1	0	1	0
	NO. MISSING IN						
	L4 L5 L6						
NO. MISSING							
0	0	0	0	0	0	0	0
1	1	0	0	0	1		
1	1	1	0	0	0		
	0.50	0.453	0.849	0.590	1.092	1.610	1.610
	1.00	2.00	3.00	4.00	5.00	6.00	7.00
	10.00	20.00	30.00	40.00	50.00	60.00	70.00
	80.00	90.00	100.00	110.00	120.00	130.00	140.00
	150.00	160.00	170.00	180.00	190.00	200.00	210.00
	220.00	230.00	240.00	250.00	260.00	270.00	280.00
	290.00	300.00	310.00	320.00	330.00	340.00	350.00
	360.00	370.00	380.00	390.00	400.00	410.00	420.00
	430.00	440.00	450.00	460.00	470.00	480.00	490.00
	500.00	510.00	520.00	530.00	540.00	550.00	560.00
	570.00	580.00	590.00	600.00	610.00	620.00	630.00
	640.00	650.00	660.00	670.00	680.00	690.00	700.00
	710.00	720.00	730.00	740.00	750.00	760.00	770.00
	780.00	790.00	800.00	810.00	820.00	830.00	840.00
	850.00	860.00	870.00	880.00	890.00	900.00	910.00
	920.00	930.00	940.00	950.00	960.00	970.00	980.00
	990.00	1000.00	1010.00	1020.00	1030.00	1040.00	1050.00
	1060.00	1070.00	1080.00	1090.00	1100.00	1110.00	1120.00
	1130.00	1140.00	1150.00	1160.00	1170.00	1180.00	1190.00
	1200.00	1210.00	1220.00	1230.00	1240.00	1250.00	1260.00
	1270.00	1280.00	1290.00	1300.00	1310.00	1320.00	1330.00
	1340.00	1350.00	1360.00	1370.00	1380.00	1390.00	1400.00
	1410.00	1420.00	1430.00	1440.00	1450.00	1460.00	1470.00
	1480.00	1490.00	1500.00	1510.00	1520.00	1530.00	1540.00
	1550.00	1560.00	1570.00	1580.00	1590.00	1600.00	1610.00
	1620.00	1630.00	1640.00	1650.00	1660.00	1670.00	1680.00
	1690.00	1700.00	1710.00	1720.00	1730.00	1740.00	1750.00
	1760.00	1770.00	1780.00	1790.00	1800.00	1810.00	1820.00
	1830.00	1840.00	1850.00	1860.00	1870.00	1880.00	1890.00
	1900.00	1910.00	1920.00	1930.00	1940.00	1950.00	1960.00
	1970.00	1980.00	1990.00	2000.00	2010.00	2020.00	2030.00
	2040.00	2050.00	2060.00	2070.00	2080.00	2090.00	2100.00
	2110.00	2120.00	2130.00	2140.00	2150.00	2160.00	2170.00
	2180.00	2190.00	2200.00	2210.00	2220.00	2230.00	2240.00
	2250.00	2260.00	2270.00	2280.00	2290.00	2300.00	2310.00
	2320.00	2330.00	2340.00	2350.00	2360.00	2370.00	2380.00
	2390.00	2400.00	2410.00	2420.00	2430.00	2440.00	2450.00
	2460.00	2470.00	2480.00	2490.00	2500.00	2510.00	2520.00

[illegible]

LAMBDA :	1	0	2	1	0	0	1
NO.MISSING	0	0	0	0	0	0	1
NO.MISSING IN L4 L5 L6	0	0	0	0	0	0	1
BANMA	3.00	2.00	4.00	10.00	50.00	100.00	
	1.355	1.015	1.691	3.698	17.036	33.703	
	3.467	2.467	4.467	10.467	50.467	100.467	

LAMBDA : 2 0 1 0 0 1 1

NO. MISSING
L4 L5 L6
0 0 0 0
1 0 0 1

0.50 1.00 2.00
0.487 0.649 1.015
0.967 1.467 2.467

BAHWA
3.00
1.355
3.467

4.00 10.00 50.00 100.00
1.691 3.698 17.036 33.703
4.467 10.467 50.467 100.467

LAMBDA : 2 0 2 0 0 0 2

NO. MISSING
L4 L5 L6
0 0 0 0
0 0 0 0

0.50 1.00 2.00
0.528 0.778 1.278

BAHWA
3.00
1.778

4.00 10.00 50.00 100.00
2.278 5.278 25.278 50.278

R = 3 SS = 3
 LAMBDA STAR : 0 3 0

LAMBDA : 0 0 0 0 3 0 0
 NO. MISSING L4 L5 L6
 0 0 0 0
 1 0 1 0
 2 0 2 0

GAMMA
 3.00 2.00 1.00 0.50
 1.185 0.852 0.519 0.352
 1.276 0.942 0.607 0.437
 1.534 1.198 0.857 0.679
 4.00 10.00 50.00 100.00
 1.519 3.519 16.852 33.519
 1.610 3.611 16.944 33.611
 1.869 3.871 17.206 33.873

LAMBDA : 0 1 0 0 2 0 1
 NO. MISSING L4 L5 L6
 0 0 0 0
 1 0 1 0
 2 0 2 0

GAMMA
 3.00 2.00 1.00 0.50
 0.953 0.702 0.450 0.323
 1.088 0.832 0.568 0.426
 3.429 2.429 1.429 0.929
 4.00 10.00 50.00 100.00
 1.203 2.704 12.704 25.204
 1.342 2.849 12.853 25.354
 4.429 10.429 50.429 100.429

LAMBDA : 0 2 0 0 1 0 2
 NO. MISSING L4 L5 L6
 0 0 0 0
 1 0 1 0

GAMMA
 3.00 2.00 1.00 0.50
 0.846 0.641 0.430 0.317
 1.750 1.250 0.750 0.500
 4.00 10.00 50.00 100.00
 1.049 2.256 10.260 20.260
 2.250 5.250 25.250 50.250

LAMBDA : 0 3 0 0 0 0 3
 NO. MISSING L4 L5 L6
 0 0 0 0
 0 0 0 0

GAMMA
 3.00 2.00 1.00 0.50
 1.185 0.852 0.519 0.352
 4.00 10.00 50.00 100.00
 1.519 3.519 16.852 33.519

R = 3 SS = 4
LAMBDA STAR : 1 2 1

[illegible]

LAMBDA :	NO. MISSING						NO. MISSING IN L4 L5 L6	BAYMIA						
	0	1	0	1	1	0		0.50	1.00	2.00	3.00	4.00	10.00	50.00
0	0	0	0	0	0	0	0.322	0.449	0.700	0.950	1.200	2.701	12.701	25.201
1	1	0	0	1	0	0	0.421	0.557	0.816	1.069	1.321	2.825	12.827	25.327
1	1	0	0	1	0	0	0.417	0.550	0.806	1.058	1.309	2.811	12.812	25.312
1	1	1	0	0	0	0	0.421	0.557	0.816	1.069	1.321	2.825	12.827	25.327
2	2	0	0	1	1	1	0.720	0.895	1.184	1.451	1.710	3.228	13.238	25.740
2	2	1	0	1	1	1	0.658	0.800	1.061	1.315	1.567	3.072	13.074	25.574
2	2	1	1	0	1	0	0.720	0.895	1.184	1.451	1.710	3.228	13.238	25.740

LAMBDA :	NO. MISSING					NO. MISSING IN					GAMMA								
	1	0	0	2	1	0	1	0	2	1	0	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
	0	0	0	0	0	0	0	0	0	0	0	0.328	0.459	0.713	0.964	1.215	2.717	12.718	25.218
	1	1	0	0	1	0	0	1	0	1	0	0.417	0.550	0.806	1.058	1.309	2.811	12.812	25.312
	1	1	0	0	1	0	1	0	0	0	0	0.421	0.557	0.816	1.069	1.321	2.825	12.827	25.327
	2	2	0	1	1	0	1	1	0	1	1	0.658	0.800	1.061	1.315	1.567	3.072	13.074	25.574
	2	2	0	2	0	0	0.720	0.895	1.184	1.451	1.710	3.228	13.238	25.740					

LAMBDA : 0 1 1 1 1 0 1

NO. MISSING IN
L4 L5 L6

NO. MISSING	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0.314	0.424	0.632	0.835	1.037	2.241	10.243	20.244
1	0.440	0.583	0.826	1.047	1.260	2.487	10.505	20.508
2	0.419	0.544	0.766	0.976	1.182	2.394	10.401	20.402
3	0.929	1.429	2.429	3.429	4.429	10.429	50.429	100.429

LAMBDA : 0 2 0 1 0 1 1

NO. MISSING IN
L4 L5 L6

NO. MISSING	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0.312	0.420	0.626	0.828	1.029	2.232	10.234	20.234
1	0.440	0.583	0.826	1.047	1.260	2.487	10.505	20.508
2	0.440	0.583	0.826	1.047	1.260	2.487	10.505	20.508
3	0.929	1.429	2.429	3.429	4.429	10.429	50.429	100.429

LAMBDA : 1 0 1 0 2 0 1

NO. MISSING IN
L4 L5 L6

NO. MISSING	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0.312	0.420	0.626	0.828	1.029	2.232	10.234	20.234
1	0.419	0.544	0.766	0.976	1.182	2.394	10.401	20.402
2	0.929	1.429	2.429	3.429	4.429	10.429	50.429	100.429

LAMBDA : 1 1 0 0 1 1 1

NO. MISSING IN
L4 L5 L6

NO. MISSING	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0.314	0.424	0.632	0.835	1.037	2.241	10.243	20.244
1	0.419	0.544	0.766	0.976	1.182	2.394	10.401	20.402
2	0.440	0.583	0.826	1.047	1.260	2.487	10.505	20.508
3	0.929	1.429	2.429	3.429	4.429	10.429	50.429	100.429

[illegible]

LAMBDA : 1 1 0 1 0 2 0

NO. MISSING	NO. MISSING IN						GAMMA					
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00		
0	0	0	0	0.420	0.626	0.828	1.029	2.232	10.234	20.234		
1	0	0	1	0.521	0.731	0.934	1.136	2.340	10.343	20.343		
1	1	0	0	0.583	0.826	1.047	1.260	2.487	10.505	20.508		
2	0	0	2	0.887	1.147	1.375	1.592	2.827	10.849	20.852		
2	1	0	1	0.887	1.147	1.375	1.592	2.827	10.849	20.852		

LAMBDA : 2 0 0 0 1 2 0

NO. MISSING	NO. MISSING IN						GAMMA					
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00		
0	0	0	0	0.441	0.656	0.863	1.067	2.276	10.281	20.282		
1	0	0	1	0.528	0.742	0.948	1.151	2.358	10.362	20.363		
1	0	1	0	0.583	0.826	1.047	1.260	2.487	10.505	20.508		
2	0	0	2	0.762	0.974	1.179	1.381	2.585	10.588	20.588		
2	0	1	1	0.887	1.147	1.375	1.592	2.827	10.849	20.852		

LAMBDA : 0 1 2 2 0 0 1

NO. MISSING	NO. MISSING IN						GAMMA					
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00		
0	0	0	0	0.438	0.637	0.822	0.999	2.024	8.708	17.044		
1	1	0	0	0.580	0.808	1.008	1.196	2.244	8.944	17.282		
2	2	0	0	1.429	2.429	3.429	4.429	10.429	50.429	100.429		

LAMBDA : 1 0 2 1 1 0 1

NO. MISSING	NO. MISSING IN						GAMMA					
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00		
0	0	0	0	0.407	0.588	0.760	0.931	1.938	8.610	16.944		
1	0	1	0	0.580	0.808	1.008	1.196	2.244	8.944	17.282		
1	1	0	0	0.528	0.722	0.901	1.075	2.090	8.766	17.101		
2	1	1	0	1.429	2.429	3.429	4.429	10.429	50.429	100.429		

LAMBDA : 1 1 1 1 0 1 1

NO. MISSING	NO. MISSING IN					
	L4	L5	L6			
0	0	0	0	0		
1	1	0	0	1		
1	1	1	0	0		
2	2	1	0	1		

GAMMA					
3.00	4.00	10.00	50.00	100.00	
0.752	0.921	1.927	8.596	16.930	
1.008	1.196	2.244	8.944	17.282	
1.008	1.196	2.244	8.944	17.282	
3.429	4.429	10.429	50.429	100.429	

LAMBDA : 2 0 1 0 1 1 1

NO. MISSING	NO. MISSING IN					
	L4	L5	L6			
0	0	0	0	0		
1	1	0	0	1		
1	1	0	1	0		
2	2	0	1	1		

GAMMA					
3.00	4.00	10.00	50.00	100.00	
0.752	0.931	1.938	8.610	16.944	
0.901	1.175	2.090	8.766	17.101	
1.008	1.156	2.244	8.944	17.282	
3.429	4.429	10.429	50.429	100.429	

LAMBDA : 2 1 0 0 0 2 1

NO. MISSING	NO. MISSING IN					
	L4	L5	L6			
0	0	0	0	0		
1	1	0	0	1		
2	2	0	0	2		

GAMMA					
3.00	4.00	10.00	50.00	100.00	
0.822	0.999	2.024	8.708	17.044	
1.008	1.196	2.244	8.944	17.282	
3.429	4.429	10.429	50.429	100.429	

LAMBDA : 1 1 2 1 0 0 2

NO. MISSING	NO. MISSING IN					
	L4	L5	L6			
0	0	0	0	0		
1	1	1	0	0		
2	2	1	0	0		

GAMMA					
3.00	4.00	10.00	50.00	100.00	
0.798	0.959	1.861	7.608	14.756	
1.750	2.250	5.250	25.250	50.250	

LAMBDA : 2 0 2 0 1 0 2

NO. MISSING	NO. MISSING IN
	L4 L5 L6

	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0.311	0.407	0.575	0.731	0.881	1.754	7.479	14.624	
0.500	0.750	1.250	1.750	2.250	5.250	25.250	50.250	

LAMBDA : 2 1 1 0 0 1 2

NO. MISSING	NO. MISSING IN L4 L5 L6
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GAMMA								
	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0.324	0.436	0.627	0.798	0.959	1.861	7.408	14.756	
0.500	0.750	1.250	1.750	2.250	5.250	25.250	50.250	

LAMBDA : 2 1 2 0 0 3

NO. MISSING	NO. MISSING IN
	L4 L5 L6

0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0.352	0.519	0.852	1.185	1.519	3.519	16.852	33.519

LAMBDA :	NO. MISSING				NO. MISSING IN				GAMMA							
	2	0	1	1	0	2	0	1	0	0.50	1.00	2.00	3.00	4.00	10.00	50.00
0	0	0	0	0	0	0	0.306	0.402	0.580	0.752	0.922	1.929	1.929	8.601	16.935	
1	1	0	0	0	1	0.400	0.500	0.679	0.850	1.019	1.694	2.024	2.024	8.694	17.027	
2	1	1	0	0	0	0.450	0.625	0.964	1.300	1.635	3.637	3.637	3.637	16.972	33.639	
2	2	0	0	2	0	0.729	0.929	1.286	1.629	1.967	3.977	3.977	3.977	17.316	33.983	
2	2	1	0	1	1	0.729	0.929	1.286	1.629	1.967	3.977	3.977	3.977	17.316	33.983	

LAMBDA : 3 0 0 0 0 3 0

NO. MISSING		NO. MISSING IN L4 L5 L6					GAMMA					
		0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00			
0	0	0.352	0.519	0.852	1.185	1.519	3.519	16.852	33.519			
1	0	0.450	0.625	0.964	1.300	1.635	3.637	16.972	33.639			
2	0	0.729	0.929	1.286	1.629	1.967	3.977	17.316	33.983			

LAMBDA : 1 0 3 2 0 0 1

NO. MISSING		NO. MISSING IN L4 L5 L6					GAMMA					
		0	1	2	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0		0	0	0	0.329	0.459	0.714	0.965	1.216	2.718	12.720	25.220
1		1	0	0	0.443	0.596	0.872	1.134	1.390	2.905	12.914	25.415
2		2	0	0	0.929	1.429	2.429	3.429	4.429	10.429	50.429	100.429

LAMBDA : 2 0 2 1 0 1 1

NO. MISSING		NO. MISSING IN L4 L5 L6					GAMMA							
		0	1	2	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00		
		0			0.304	0.392	0.548	0.697	0.844	1.708	7.427	14.570		
		1			0.443	0.596	0.872	1.134	1.390	2.905	12.914	25.415		
		1			0.443	0.596	0.872	1.134	1.390	2.905	12.914	25.415		
		2			0.929	1.429	2.429	3.429	4.429	10.429	50.429	100.429		

LAMBDA : 3 0 1 0 0 2 1

NO. MISSING		NO. MISSING IN L4 L5 L6						GAMMA				
					0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0		0	0	0	0.329	0.459	0.714	0.965	1.216	2.718	12.720	25.220
1		0	0	1	0.443	0.596	0.872	1.134	1.390	2.905	12.914	25.415
2		0	0	2	0.929	1.429	2.429	3.429	4.429	10.429	50.429	100.429

NO. MISSING IN
L4 L5 L6

01

0.50
0.325
0.500

1.00
0.444
0.750

GAMMA

4.00
1.078
2.250

50.00
10.299
25.250

100.00
20.300
50.250

NO. MISSING IN
L4 L5 L6

0.50
0.325
0.500

1.00
0.444
0.750

GAMMA

4.00
1.078
2.250

50.00
10.299
25.250

100.00
20.300
50.250

**NO. MISSING IN
L4 L5 L6**

0.50
0.352

1.00
0.519

GAMMA

4.00
1.519

50.00
16.852

100.00
33.519

R = 4 SS = 4 0
LAMBDA STAR : 0 4 0

LAMBDA :	0	0	0	0	4	0	0
	NO. MISSING IN						
	L4 L5 L6						
NO. MISSING							
0	0	0	0	0	0	0	0
1	1	0	1	0	0	0	0
2	2	0	2	0	0	0	0
3	3	0	3	0	0	0	0

LAMBDA :	0	1	0	0	3	0	1							
	NO. MISSING IN													
	L4 L5 L6													
NO. MISSING								GAMMA						
	0.50							1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0	0	0	0.347	0.548	0.748	0.948	2.149	10.149	20.149	
1	1	0	1	0	0	0	0.398	0.602	0.804	1.004	2.206	10.207	20.207	
2	2	0	2	0	0	0	0.522	0.741	0.950	1.155	2.365	10.372	20.372	
3	3	0	3	0	0	0	1.407	2.407	3.407	4.407	10.407	50.407	100.407	

[illegible]

LAMBDA :	0	3	0	0	1	0	3
	NO. MISSING IN						
	L4 L5 L6						
NO. MISSING							
0			0	0	0		
1			0	1	0		
			0.240				
			0.338				
		0.50					
		1.00					
		0.326					
		0.505					
		2.00					
		3.00					
		0.633					
		1.172					
		0.780					
		1.505					
		10.00					
		50.00					
		100.00					
		7.367					
		16.838					
		14.510					
		33.505					

NO. MISSING	NO. MISSING IN
L4 L5 L6	

[illegible]

LAMBDA :	NO. MISSING					NO. MISSING IN L4 L5 L6	GAMMA						
	0	1	0	1	2		1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0	0	0.246	0.347	0.547	0.747	0.948	2.148	10.148	20.148
1	1	0	0	0	1	0.294	0.400	0.603	0.805	1.005	2.207	10.208	20.208
1	1	0	0	1	0	0.291	0.394	0.597	0.797	0.998	2.207	10.199	20.199
1	1	1	0	0	0	0.294	0.400	0.603	0.805	1.005	2.207	10.208	20.208
2	2	0	1	1	0	0.384	0.495	0.703	0.907	1.108	2.312	10.313	20.314
2	2	0	0	2	0	0.386	0.496	0.704	0.907	1.108	2.311	10.313	20.313
2	2	1	0	1	0	0.377	0.495	0.690	0.892	1.093	2.295	10.296	20.297
2	2	1	1	0	1	0.384	0.475	0.703	0.907	1.108	2.312	10.313	20.314
3	3	0	1	2	1	0.677	0.824	1.060	1.274	1.482	2.698	10.707	20.708
3	3	1	1	1	1	0.614	0.731	0.941	1.145	1.347	2.551	10.554	20.554
3	3	1	1	2	0	0.677	0.824	1.060	1.274	1.482	2.698	10.707	20.708

LAMBDA :	NO.MISSING				NO.MISSING IN				BANANA								
	1	0	0	3	1	0	L4	L5	L6	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0	0	0	0	0	0	0.249	0.352	0.554	0.755	0.956	2.157	10.157	20.157
1	1	0	0	0	0	0	0	1	0	0.295	0.400	0.603	0.804	1.005	2.206	10.207	20.207
2	1	2	0	0	0	0	1	1	0	0.377	0.485	0.690	0.892	1.093	2.295	10.296	20.297
3	2	2	0	0	0	0	2	0	1	0.384	0.495	0.703	0.907	1.108	2.312	10.313	20.314
4	3	3	0	0	0	0	3	1	0	0.614	0.731	0.941	1.145	1.347	2.551	10.554	20.554
5	3	3	0	0	0	0	3	0	0	0.677	0.824	1.060	1.274	1.482	2.698	10.707	20.708

LAMBDA : 0 1 1 1 2 0 1

NO. MISSING	NO. MISSING IN						BANWA					
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00		
0	0	0	0	0.238	0.496	0.664	0.831	1.833	8.500	16.834		
1	1	0	0	0.290	0.561	0.731	0.900	1.905	8.574	16.908		
2	1	0	0	0.287	0.553	0.722	0.891	1.894	8.562	16.896		
3	2	0	0	0.417	0.760	0.949	1.130	2.159	8.845	17.181		
	2	1	0	0.394	0.699	0.877	1.051	2.065	8.740	17.075		
	3	1	2	0.907	2.407	3.407	4.407	10.407	50.407	100.407		

LAMBDA : 0 2 0 1 1 1 1

NO. MISSING	NO. MISSING IN						BANWA					
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00		
0	0	0	0	0.236	0.491	0.659	0.826	1.827	8.494	16.828		
1	1	0	1	0.290	0.561	0.731	0.900	1.905	8.574	16.908		
2	1	0	0	0.291	0.561	0.732	0.900	1.905	8.574	16.907		
3	2	0	1	0.290	0.561	0.731	0.900	1.905	8.574	16.908		
	2	0	1	0.417	0.760	0.949	1.130	2.159	8.845	17.181		
	2	1	0	0.394	0.699	0.877	1.051	2.065	8.740	17.075		
	3	1	1	0.417	0.760	0.949	1.130	2.159	8.845	17.181		
		1	1	0.907	2.407	3.407	4.407	10.407	50.407	100.407		

LAMBDA : 1 0 1 0 3 0 1

NO. MISSING	NO. MISSING IN						BANWA					
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00		
0	0	0	0	0.238	0.496	0.664	0.831	1.833	8.500	16.833		
1	1	0	0	0.287	0.553	0.722	0.891	1.894	8.562	16.896		
2	2	0	0	0.394	0.699	0.877	1.051	2.065	8.740	17.075		
3		0	3	0.907	2.407	3.407	4.407	10.407	50.407	100.407		

LAMBDA : 1 1 0 0 2 1 1

NO. MISSING	NO. MISSING IN						GAMMA	4.00	10.00	50.00	100.00
	L4	L5	L6	L4	L5	L6					
0	0	0	0	0.326	0.496	0.664	0.831	1.833	8.500	16.834	
1	0	0	1	0.379	0.553	0.722	0.891	1.894	8.562	16.896	
2	0	1	0	0.395	0.561	0.731	0.900	1.905	8.574	16.908	
3	0	1	1	0.507	0.699	0.877	1.051	2.065	8.740	17.075	
	0	2	0	0.547	0.760	0.949	1.130	2.159	8.845	17.181	
	0	2	1	1.407	2.407	3.407	4.407	10.407	50.407	100.407	

LAMBDA : 0 2 1 1 1 0 2

NO. MISSING	NO. MISSING IN						GAMMA	4.00	10.00	50.00	100.00
	L4	L5	L6	L4	L5	L6					
0	0	0	0	0.316	0.467	0.614	0.759	1.620	7.337	14.481	
1	0	1	0	0.414	0.595	0.758	0.914	1.801	7.536	14.681	
2	1	0	0	0.391	0.558	0.713	0.863	1.735	7.459	14.603	
	1	1	0	0.733	1.233	1.733	2.233	5.233	25.233	50.233	

LAMBDA : 0 3 0 1 0 1 2

NO. MISSING	NO. MISSING IN						GAMMA	4.00	10.00	50.00	100.00
	L4	L5	L6	L4	L5	L6					
0	0	0	0	0.317	0.468	0.614	0.759	1.620	7.337	14.480	
1	0	0	1	0.414	0.595	0.758	0.914	1.801	7.536	14.681	
2	1	0	0	0.414	0.595	0.758	0.914	1.801	7.536	14.681	
	1	0	1	0.733	1.233	1.733	2.233	5.233	25.233	50.233	

LAMBDA : 1 1 1 0 2 0 2

NO. MISSING	NO. MISSING IN						GAMMA	4.00	10.00	50.00	100.00
	L4	L5	L6	L4	L5	L6					
0	0	0	0	0.313	0.462	0.608	0.752	1.613	7.329	14.472	
1	0	1	0	0.391	0.558	0.713	0.863	1.735	7.459	14.603	
2	0	2	0	0.733	1.233	1.733	2.233	5.233	25.233	50.233	

LAMBDA: 1 2 0 0 1 1 2

NO. MISSING	NO. MISSING IN				0.50	GAMMA				100.00		
	L4	L5	L6			1.00	2.00	3.00	4.00			
0	0	0	0		0.236	0.316	0.467	0.614	0.759	1.620	7.337	14.481
1	1	0	0	1	0.296	0.391	0.558	0.713	0.843	1.735	7.459	14.403
1	1	0	1	0	0.307	0.414	0.595	0.758	0.914	1.881	7.536	14.681
2	2	0	1	1	0.483	0.733	1.233	1.733	2.233	5.233	25.233	50.233

LAMBDA : 0 3 1 1 0 0 3

NO. MISSING	NO. MISSING IN						GAMMA	4.00	10.00	50.00	100.00
	L4	L5	L6	0.50	1.00	2.00					
0	0	0	0	0.246	0.335	0.490	0.633	0.769	1.545	6.564	12.817
1	1	1	0	0.338	0.505	0.838	1.172	1.505	3.505	16.838	33.505

LAMBDA : 1 2 1 0 1 0 3

NO. MISSING	NO. MISSING IN					0.50	BAPPA			50.00	100.00
	L4	L5	L6	1.00	2.00		3.00	4.00	10.00		
0	0	0	0	0.239	0.321	0.466	0.601	0.732	1.496	6.506	12.757
1	0	1	0	0.338	0.505	0.838	1.172	1.505	3.505	16.838	33.505

LAMBDA : 1 3 0 0 1 3

NO. MISSING	NO. MISSING IN						BAWNA	10.00	50.00	100.00	
	L4	L5	L6	0.50	1.00	2.00					
0	0	0	0	0.246	0.335	0.490	0.633	0.769	1.545	6.564	12.817
1	1	0	0	0.338	0.505	0.838	1.172	1.505	3.565	16.838	33.505

LAMBDA: 1 3 1 0 0 0 4

	NO.MISSING IN											
	L4	L5	L6									
NO.MISSING	0	0	0	0	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
					0.264	0.389	0.639	0.889	1.139	2.639	12.639	25.139

LAMBDA :	0	0	2	2	2	0	0		
	NO.MISSING IN								
	L4 L5 L6								
NO.MISSING		0.50	1.00	2.00	GAMMA 3.00	4.00	10.00	50.00	100.00
0	0	0	0	0	0	0	0	0	0
1	1	0.243	0.333	0.505	0.674	0.842	1.845	8.513	16.847
1	1	0.293	0.388	0.565	0.736	0.905	1.910	8.580	16.914
2	2	0.286	0.378	0.550	0.719	0.887	1.889	8.557	16.891
2	2	0.401	0.515	0.708	0.887	1.060	2.074	8.750	17.064
2	2	0.377	0.475	0.653	0.824	0.993	1.998	8.647	17.001
2	2	0.368	0.461	0.633	0.802	0.970	1.972	8.640	16.974
3	3	0.675	0.814	1.025	1.211	1.388	2.410	9.069	17.424
3	3	0.605	0.706	0.884	1.055	1.224	2.229	8.898	17.231

LAMBDA : 0 1 1 2 1 1 0

NO.MISSING	NO.MISSING IN						BANYA	10.00	50.00	100.00	
	L4	L5	L6	0.50	1.00	2.00					3.00
0	0	0	0	0.237	0.324	0.494	0.662	0.829	1.830	8.497	16.831
1	1	0	0	0.293	0.368	0.565	0.736	0.905	1.910	8.580	16.914
1	1	0	0	0.287	0.378	0.550	0.719	0.887	1.890	8.558	16.891
1	1	0	0	0.284	0.374	0.545	0.713	0.881	1.882	8.550	16.884
2	2	0	1	0.401	0.515	0.708	0.887	1.060	2.074	8.750	17.084
2	2	1	0	0.377	0.475	0.653	0.824	0.993	1.998	8.667	17.001
2	2	1	1	0.379	0.478	0.655	0.826	0.994	1.999	8.668	17.002
2	2	0	0	0.377	0.475	0.653	0.824	0.993	1.998	8.667	17.001
3	3	1	1	0.675	0.814	1.025	1.211	1.388	2.410	9.089	17.424
3	3	0	1	0.605	0.706	0.884	1.055	1.224	2.229	8.898	17.331
3	3	2	1	0.675	0.814	1.025	1.211	1.388	2.410	9.089	17.424

LAMBDA : 0 2 0 2 0 2 0

NO. MISSING	NO. MISSING IN						GAMMA	4.00	10.00	50.00	100.00
	L4	L5	L6								
0	0	0	0	0	0	0	0.656	0.823	1.824	8.491	16.824
1	1	0	0	1	0	0	0.719	0.887	1.890	8.558	16.891
1	1	0	0	0	0	0	0.719	0.887	1.890	8.558	16.891
2	2	0	0	2	0	0	0.887	1.060	2.074	8.750	17.084
2	2	0	1	1	0	1	0.826	0.994	1.999	8.968	17.902
3	3	0	2	1	0	2	0.887	1.060	2.074	8.968	17.084
3	3	1	0	2	1	0	1.211	1.388	2.410	9.089	17.424
3	3	2	0	1	2	0	1.211	1.388	2.410	9.089	17.424

LAMBDA : 1 0 1 1 2 1 0

NO. MISSING	NO. MISSING IN						GAMMA	4.00	10.00	50.00	100.00
	L4	L5	L6								
0	0	0	0	0	0	0	0.662	0.829	1.830	8.497	16.831
1	1	0	0	1	0	0	0.719	0.887	1.889	8.557	16.891
1	1	0	1	0	0	0	0.713	0.881	1.882	8.550	16.884
1	1	0	0	0	0	0	0.719	0.887	1.889	8.557	16.891
2	2	0	1	1	0	0	0.824	0.993	1.998	8.667	17.001
2	2	0	2	0	0	0	0.826	0.994	1.999	8.668	17.002
2	2	1	0	1	0	1	0.802	0.970	1.972	8.640	16.974
2	2	1	1	0	0	0	0.824	0.993	1.998	8.667	17.001
3	3	0	2	1	1	0	1.211	1.388	2.410	9.089	17.424
3	3	1	1	1	1	0	1.055	1.224	2.229	8.898	17.231
3	3	1	2	0	1	2	1.211	1.388	2.410	9.089	17.424

LAMBDA : 1 1 0 1 1 2 0

NO. MISSING	NO. MISSING IN						GAMMA	4.00	10.00	50.00	100.00
	L4	L5	L6								
0	0	0	0	0	0	0	0.662	0.829	1.830	8.497	16.831
1	1	0	0	1	0	0	0.713	0.881	1.882	8.550	16.884
1	1	0	0	0	0	0	0.719	0.887	1.890	8.558	16.891
1	1	0	0	0	0	0	0.736	0.905	1.910	8.580	16.914
2	2	0	0	2	0	0	0.824	0.993	1.998	8.667	17.001
2	2	0	1	1	1	0	0.826	0.994	1.999	8.668	17.002
2	2	1	0	1	0	1	0.824	0.993	1.998	8.667	17.001
2	2	1	1	0	0	0	0.887	1.060	2.074	8.750	17.084
3	3	0	1	2	2	0	1.211	1.388	2.410	9.089	17.424
3	3	1	1	1	0	2	1.055	1.224	2.229	8.898	17.231
3	3	1	2	1	1	1	1.211	1.388	2.410	9.089	17.424

LAMBDA : 2 0 0 0 2 2 0

NO.MISSING	NO.MISSING IN						GAMMA			
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0.333	0.505	0.674	0.842	1.845	8.513	16.847
1	0	0	1	0.378	0.550	0.719	0.887	1.889	8.557	16.891
1	0	1	0	0.388	0.565	0.736	0.905	1.910	8.580	16.914
2	0	0	2	0.461	0.633	0.802	0.970	1.972	8.640	16.974
2	0	1	1	0.475	0.653	0.824	0.993	1.998	8.667	17.001
2	0	2	0	0.515	0.708	0.887	1.060	2.074	8.750	17.084
3	0	1	2	0.706	0.884	1.055	1.224	2.229	8.898	17.231
3	0	2	1	0.814	1.025	1.211	1.388	2.410	9.089	17.424

LAMBDA : 0 1 2 2 1 0 1

NO.MISSING	NO.MISSING IN						GAMMA			
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0.319	0.470	0.617	0.763	1.624	7.342	14.485
1	0	1	0	0.396	0.564	0.719	0.869	1.742	7.466	14.610
1	1	0	0	0.373	0.529	0.678	0.824	1.688	7.406	14.549
2	1	1	0	0.543	0.742	0.914	1.075	1.972	7.712	14.859
2	2	0	0	0.495	0.668	0.825	0.976	1.849	7.574	14.718
3	2	1	0	1.407	2.407	3.407	4.407	10.407	50.407	100.407

LAMBDA : 0 2 1 2 0 1 1

NO.MISSING	NO.MISSING IN						GAMMA			
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0.312	0.460	0.606	0.750	1.610	7.326	14.469
1	0	0	1	0.396	0.564	0.719	0.869	1.742	7.466	14.610
1	1	0	0	0.375	0.530	0.679	0.825	1.688	7.407	14.550
2	1	0	1	0.543	0.742	0.914	1.075	1.972	7.712	14.859
2	2	0	0	0.543	0.742	0.914	1.075	1.972	7.712	14.859
3	2	0	1	1.407	2.407	3.407	4.407	10.407	50.407	100.407

LAMBDA : 1 0 2 1 2 0 1

NO. MISSING	NO. MISSING IN						GAMMA	10.00	50.00	100.00
	L4	L5	L6	0.50	1.00	2.00				
0	0	0	0	0.233	0.312	0.460	0.605	1.609	7.325	14.468
1	1	0	1	0.287	0.373	0.529	0.678	1.688	7.406	14.549
2	1	1	0	0.282	0.365	0.517	0.663	1.670	7.386	14.530
3	2	0	2	0.416	0.543	0.742	0.914	1.972	7.712	14.859
3	2	1	1	0.391	0.495	0.668	0.825	1.849	7.574	14.718
3	3	1	2	0.907	1.407	2.407	3.407	10.407	50.407	100.407

LAMBDA : 1 1 1 1 1 1 1

NO. MISSING	NO. MISSING IN						GAMMA	10.00	50.00	100.00
	L4	L5	L6	0.50	1.00	2.00				
0	0	0	0	0.232	0.309	0.456	0.601	1.604	7.320	14.463
1	1	0	1	0.287	0.373	0.529	0.678	1.688	7.406	14.549
1	1	0	1	0.288	0.375	0.530	0.679	1.688	7.407	14.550
2	1	1	0	0.287	0.373	0.529	0.678	1.688	7.406	14.549
2	2	0	1	0.416	0.543	0.742	0.914	1.972	7.712	14.859
2	2	1	0	0.391	0.495	0.668	0.825	1.849	7.574	14.718
3	3	1	1	0.416	0.543	0.742	0.914	1.972	7.712	14.859
3	3	1	1	0.907	1.407	2.407	3.407	10.407	50.407	100.407

LAMBDA : 1 2 0 1 0 2 1

NO. MISSING	NO. MISSING IN						GAMMA	10.00	50.00	100.00
	L4	L5	L6	0.50	1.00	2.00				
0	0	0	0	0.233	0.312	0.460	0.606	1.610	7.326	14.469
1	1	0	1	0.288	0.375	0.530	0.679	1.688	7.407	14.550
2	1	1	0	0.299	0.396	0.564	0.719	1.742	7.466	14.610
2	2	0	2	0.416	0.543	0.742	0.914	1.972	7.712	14.859
2	2	1	0	0.416	0.543	0.742	0.914	1.972	7.712	14.859
3	3	1	0	0.907	1.407	2.407	3.407	10.407	50.407	100.407

LAMBDA : 2 0 1 0 2 1 1

NO. MISSING		NO. MISSING IN L4 L5 L6						GAMMA			
		0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00		
0	0	0.233	0.312	0.460	0.605	0.749	1.609	7.325	14.468		
1	0	0.282	0.365	0.517	0.663	0.808	1.670	7.386	14.530		
1	0	0.287	0.373	0.529	0.678	0.824	1.688	7.406	14.549		
2	0	0.391	0.495	0.668	0.825	0.976	1.849	7.574	14.718		
2	0	0.416	0.543	0.742	0.914	1.075	1.972	7.712	14.859		
3	0	0.907	1.407	2.407	3.407	4.407	10.407	50.407	100.407		

LAMBDA : 2 1 0 0 1 2 1

NO. MISSING		NO. MISSING IN						GAMMA				
		L4	L5	L6	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0	0.237	0.319	0.470	0.617	0.763	1.624	7.342	14.485
1	1	0	0	1	0.287	0.373	0.529	0.678	0.824	1.688	7.406	14.549
1	1	0	0	1	0.299	0.396	0.564	0.719	0.869	1.742	7.466	14.610
2	2	0	0	2	0.391	0.495	0.668	0.825	0.976	1.849	7.574	14.718
2	2	0	0	1	0.416	0.543	0.742	0.914	1.075	1.972	7.712	14.859
3	3	0	1	2	0.907	1.407	2.407	3.407	4.407	10.407	50.407	100.407

LAMBDA : 0 2 2 2 0 0 2

NO. MISSING		NO. MISSING IN L4 L5 L6					GAMMA			
		0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00	
0	0	0.241	0.324	0.470	0.605	0.737	1.501	6.511	12.763	
1	0	0.307	0.411	0.585	0.736	0.879	1.669	6.698	12.952	
2	0	0.483	0.733	1.233	1.733	2.233	5.233	25.233	50.233	

LAMBDA : 1 1 2 1 1 0 2

NO. MISSING		NO. MISSING IN L4 L5 L6					GAMMA			
		0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00	
0	0	0.233	0.309	0.446	0.576	0.704	1.461	6.466	12.716	
1	1	0.307	0.411	0.585	0.736	0.879	1.669	6.698	12.952	
2	2	0.483	0.733	1.233	1.733	2.233	5.233	25.233	50.233	

LAMBDA : 1 2 1 1 0 1 2

NO. MISSING	NO. MISSING IN			GAMMA							
	L4	L5	L6	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0.234	0.310	0.447	0.577	0.705	1.462	6.466	12.716
1	1	0	1	0.307	0.411	0.585	0.736	0.879	1.669	6.698	12.952
1	1	0	0	0.307	0.411	0.585	0.736	0.879	1.669	6.698	12.952
2	2	1	0	0.483	0.733	1.233	1.733	2.233	5.233	25.233	50.233

LAMBDA : 2 0 2 0 2 0 2

NO. MISSING	NO. MISSING IN						GAMMA				
	L4	L5	L6	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0.230	0.303	0.437	0.566	0.693	1.448	6.451	12.701
1	1	0	1	0.294	0.385	0.539	0.678	0.812	1.581	6.594	12.845
2	2	0	2	0.483	0.733	1.233	1.733	2.233	5.233	25.233	50.233

LAMBDA : 2 1 1 0 1 1 2

NO. MISSING	NO. MISSING IN						GAMMA				
	L4	L5	L6	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0.233	0.309	0.446	0.576	0.704	1.461	6.466	12.716
1	1	0	1	0.294	0.385	0.539	0.678	0.812	1.581	6.594	12.845
1	1	0	0	0.307	0.411	0.585	0.736	0.879	1.669	6.698	12.952
2	2	0	1	0.483	0.733	1.233	1.733	2.233	5.233	25.233	50.233

LAMBDA : 2 2 0 0 2 2 2

NO. MISSING	NO. MISSING IN			GAMMA							
	L4	L5	L6	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0.241	0.324	0.470	0.605	0.737	1.501	6.511	12.763
1	1	0	1	0.307	0.411	0.585	0.736	0.879	1.669	6.698	12.952
2	2	0	2	0.483	0.733	1.233	1.733	2.233	5.233	25.233	50.233

LAMBDA : 1 2 2 1 0 0 3

NO. MISSING	NO. MISSING IN			GAMMA							
	L4	L5	L6	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0.246	0.333	0.483	0.617	0.744	1.447	5.920	11.479
1	1	0	0	0.338	0.505	0.838	1.172	1.505	3.505	16.838	33.505

LAMBDA : 2 1 2 0 1 0 3

NO. MISSING	NO. MISSING IN			GAMMA							
	L4	L5	L6	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0.238	0.317	0.452	0.577	0.696	1.381	5.838	11.395
1	0	1	0	0.338	0.505	0.838	1.172	1.505	3.505	16.838	33.505

LAMBDA: 2 2 1 0 0 1 3

NO. MISSING	NO. MISSING IN						GAMMA					
	L4	L5	L6	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00	
0	0	0	0	0.246	0.333	0.483	0.617	0.744	1.447	5.920	11.479	
1	0	0	1	0.338	0.505	0.838	1.172	1.505	3.505	16.838	33.505	

LAIBDA : 2 2 2 0 0 4

NO. MISSING	NO. MISSING IN			GAMMA	10.00	50.00	100.00
	L4	L5	L6				
0	0.264	0.389	0.639	0.889	2.639	12.639	25.139
	0.50	1.00	2.00	3.00	4.00		

[illegible]

NO. MISSING	NO. MISSING IN			BANMA					50.00	100.00	
	L4	L5	L6	0.50	1.00	2.00	3.00	4.00			10.00
0	0	0	0	0.236	0.317	0.468	0.614	0.759	1.620	7.337	14.480
1	1	0	1	0.307	0.414	0.595	0.758	0.914	1.801	7.536	14.681
1	1	1	0	0.282	0.365	0.516	0.663	0.807	1.669	7.385	14.528
2	2	1	0	0.402	0.517	0.704	0.870	1.027	1.916	7.652	14.798
2	2	0	0	0.375	0.463	0.618	0.766	0.912	1.774	7.491	14.634
3	3	0	1	0.676	0.816	1.021	1.194	1.355	2.252	7.992	15.138
3	3	0	0	0.676	0.816	1.021	1.194	1.355	2.252	7.992	15.138

NO. MISSING	NO. MISSING IN						GAMMA	10.00	50.00	100.00
	L4	L5	L6	0.50	1.00	2.00				
0	0	0	0	0.232	0.310	0.457	0.602	1.605	7.321	14.464
1	0	0	1	0.289	0.378	0.538	0.688	1.703	7.424	14.568
1	0	0	1	0.282	0.365	0.516	0.663	1.669	7.385	14.528
1	1	0	0	0.278	0.358	0.506	0.651	1.655	7.370	14.513
2	0	1	1	0.402	0.517	0.704	0.870	1.916	7.652	14.798
2	1	0	1	0.372	0.462	0.619	0.769	1.780	7.499	14.643
2	1	1	0	0.375	0.463	0.618	0.766	1.774	7.491	14.634
2	2	0	0	0.372	0.462	0.619	0.769	1.780	7.499	14.643
3	1	1	1	0.676	0.816	1.021	1.194	2.252	7.992	15.138
3	2	0	1	0.597	0.687	0.842	0.989	1.996	7.713	14.856
3	2	1	0	0.676	0.816	1.021	1.194	2.252	7.992	15.138

LAMBDA : 1 1 1 2 0 2 0

NO. MISSING	NO. MISSING IN						GAMMA			
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0.306	0.453	0.597	0.740	1.599	7.314	14.457
1	1	0	1	0.365	0.516	0.663	0.807	1.669	7.385	14.528
1	1	0	0	0.345	0.516	0.663	0.807	1.669	7.385	14.528
2	2	0	2	0.517	0.704	0.870	1.027	1.916	7.652	14.798
2	2	1	0	0.463	0.618	0.766	0.912	1.774	7.491	14.634
2	2	3	0	0.517	0.704	0.870	1.027	1.916	7.652	14.798
3	3	1	0	0.816	1.021	1.194	1.355	2.252	7.992	15.138
3	3	2	0	0.816	1.021	1.194	1.355	2.252	7.992	15.138

LAMBDA : 2 0 1 1 2 0

NO. MISSING	NO. MISSING IN						GAMMA			
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0.310	0.457	0.602	0.746	1.605	7.321	14.464
1	1	0	1	0.358	0.506	0.651	0.795	1.655	7.370	14.513
1	1	0	0	0.365	0.516	0.663	0.807	1.669	7.385	14.528
1	1	0	0	0.378	0.538	0.688	0.836	1.703	7.424	14.568
2	2	0	2	0.462	0.619	0.769	0.915	1.780	7.499	14.643
2	2	0	1	0.463	0.618	0.766	0.912	1.774	7.491	14.634
2	2	1	0	0.462	0.619	0.769	0.915	1.780	7.499	14.643
2	2	1	1	0.517	0.704	0.870	1.027	1.916	7.652	14.798
3	3	0	1	0.816	1.021	1.194	1.355	2.252	7.992	15.138
3	3	1	0	0.887	0.842	0.989	1.135	1.996	7.713	14.856
3	3	1	1	0.816	1.021	1.194	1.355	2.252	7.992	15.138

LAMBDA : 2 1 0 1 0 3 0

NO. MISSING	NO. MISSING IN						GAMMA			
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0.317	0.468	0.614	0.759	1.620	7.337	14.480
1	1	0	1	0.365	0.516	0.663	0.807	1.669	7.385	14.528
1	1	0	0	0.414	0.595	0.758	0.914	1.801	7.536	14.681
2	2	0	2	0.463	0.618	0.766	0.912	1.774	7.491	14.634
2	2	1	0	0.517	0.704	0.870	1.027	1.916	7.652	14.798
3	3	0	3	0.816	1.021	1.194	1.355	2.252	7.992	15.138
3	3	1	0	0.816	1.021	1.194	1.355	2.252	7.992	15.138

LAMBDA : 3 0 0 0 1 3 0

NO. MISSING	NO. MISSING IN						GAMMA					
	L4	L5	L6	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00	
0	0	0	0	0.245	0.334	0.494	0.646	0.794	1.662	7.384	14.528	
1	1	0	0	0.289	0.378	0.538	0.688	0.836	1.703	7.424	14.568	
1	1	0	1	0.307	0.414	0.595	0.758	0.914	1.801	7.536	14.681	
2	2	0	0	0.372	0.462	0.619	0.769	0.915	1.780	7.499	14.643	
2	2	0	1	0.402	0.517	0.704	0.870	1.027	1.916	7.652	14.798	
3	3	0	0	0.497	0.687	0.842	0.989	1.135	1.996	7.713	14.856	
3	3	0	1	0.76	0.816	1.021	1.194	1.355	2.252	7.992	15.138	

LAMBDA : 0 1 3 3 0 0 1

NO. MISSING	NO. MISSING IN						GAMMA					
	L4	L5	L6	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00	
0	0	0	0	0.246	0.335	0.490	0.633	0.769	1.545	6.564	12.817	
1	1	0	0	0.300	0.397	0.561	0.708	0.847	1.629	6.653	12.906	
2	2	0	0	0.416	0.543	0.740	0.905	1.055	1.865	6.908	13.164	
3	3	0	0	0.907	1.407	2.407	3.407	4.407	10.407	50.407	100.407	

LAMBDA : 1 0 3 2 1 0 1

NO. MISSING	NO. MISSING IN						GAMMA					
	L4	L5	L6	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00	
0	0	0	0	0.235	0.312	0.452	0.584	0.713	1.473	6.479	12.730	
1	1	0	1	0.300	0.397	0.561	0.708	0.847	1.629	6.653	12.906	
1	1	0	0	0.284	0.365	0.507	0.640	0.770	1.530	6.537	12.788	
2	2	1	0	0.416	0.543	0.740	0.905	1.055	1.865	6.908	13.164	
2	2	0	0	0.388	0.487	0.645	0.785	0.919	1.687	6.699	12.951	
3	3	2	1	0.907	1.407	2.407	3.407	4.407	10.407	50.407	100.407	

LAMBDA : 1 1 2 2 0 1 1

NO. MISSING	NO. MISSING IN						GAMMA							
	L4 L5 L6						0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0	0	0	0.231	0.303	0.437	0.565	0.693	1.447	6.450	12.700
1	1	0	0	0	1	0	0.300	0.397	0.561	0.708	0.847	1.629	6.653	12.906
1	1	0	0	0	0	1	0.286	0.366	0.507	0.639	0.768	1.526	6.531	12.781
2	2	1	0	1	0	0	0.416	0.543	0.740	0.905	1.055	1.865	6.908	13.164
2	2	0	0	0	0	0	0.416	0.543	0.740	0.905	1.055	1.865	6.908	13.164
3	3	2	0	1	0	1	0.907	1.407	2.407	3.407	4.407	10.407	50.407	100.407

LAMBDA : 2 0 2 1 1 1 1

NO. MISSING	NO. MISSING IN						GAMMA	2.00	1.00	0.50	10.00	50.00	100.00
	L4	L5	L6	L4	L5	L6							
0	0	0	0	0	0	0	0.557	0.430	0.299	0.228	0.684	6.438	12.689
1	0	0	1	0	0	1	0.640	0.507	0.365	0.284	0.770	6.537	12.788
1	0	1	0	0	1	0	0.639	0.507	0.366	0.286	0.768	6.531	12.781
1	0	0	0	0	0	0	0.640	0.507	0.365	0.284	0.770	6.537	12.788
2	0	1	1	0	1	1	0.905	0.740	0.543	0.416	1.055	6.908	13.164
2	1	1	0	1	1	0	0.785	0.645	0.487	0.388	0.919	6.699	12.951
2	1	1	0	1	1	0	0.905	0.740	0.543	0.416	1.055	6.908	13.164
3	1	1	1	1	1	1	3.407	2.407	1.407	0.907	4.407	50.407	100.407

LAMBDA : 2 1 1 1 0 2 1

NO. MISSING	NO. MISSING IN						GAMMA	2.00	1.00	0.50	10.00	50.00	100.00
	L4	L5	L6	L4	L5	L6							
0	0	0	0	0	0	0	0.565	0.437	0.303	0.231	0.693	6.450	12.700
1	0	0	1	0	0	1	0.639	0.507	0.366	0.286	0.768	6.531	12.781
1	0	0	0	0	0	0	0.708	0.561	0.397	0.300	0.847	6.653	12.906
2	0	0	2	0	0	2	0.905	0.740	0.543	0.416	1.055	6.908	13.164
2	1	0	1	1	0	1	0.905	0.740	0.543	0.416	1.055	6.908	13.164
3	1	0	2	1	0	2	3.407	2.407	1.407	0.907	4.407	50.407	100.407

LAMBDA : 3 0 1 0 1 2 1

NO. MISSING	NO. MISSING IN						GAMMA	2.00	1.00	0.50	10.00	50.00	100.00
	L4	L5	L6	L4	L5	L6							
0	0	0	0	0	0	0	0.584	0.452	0.312	0.235	0.713	6.479	12.730
1	0	0	1	0	0	1	0.640	0.507	0.365	0.284	0.770	6.537	12.788
1	0	1	0	0	1	0	0.708	0.561	0.397	0.300	0.847	6.653	12.906
2	0	0	2	0	0	2	0.785	0.645	0.487	0.388	0.919	6.699	12.951
2	0	1	1	0	1	1	0.905	0.740	0.543	0.416	1.055	6.908	13.164
3	0	1	2	0	1	2	3.407	2.407	1.407	0.907	4.407	50.407	100.407

LAMBDA : 3 1 0 0 0 3 1

NO. MISSING	NO. MISSING IN						GAMMA	2.00	1.00	0.50	10.00	50.00	100.00
	L4	L5	L6	L4	L5	L6							
0	0	0	0	0	0	0	0.633	0.490	0.335	0.246	0.769	6.564	12.817
1	0	0	1	0	0	1	0.708	0.561	0.397	0.300	0.847	6.653	12.906
2	0	0	2	0	0	2	0.905	0.740	0.543	0.416	1.055	6.908	13.164
3	0	0	3	0	0	3	3.407	2.407	1.407	0.907	4.407	50.407	100.407

LAMBDA : 1 1 3 2 0 0 2

NO. MISSING		NO. MISSING IN L4 L5 L6						BAMWA				
								3.00	4.00	10.00	50.00	100.00
0	0	0	0	0	0	0	0	0.598	0.721	1.418	5.884	11.443
1	1	1	0	0	0	0	0	0.730	0.866	1.592	6.084	11.646
2	2	2	0	0	0	0	0	1.733	2.233	5.233	25.233	50.233

LAMBDA : 2 0 3 1 1 0 2

NO. MISSING		NO. MISSING IN L4 L5 L6						BAMWA				
								3.00	4.00	10.00	50.00	100.00
0	0	0	0	0	0	0	0	0.549	0.665	1.342	5.793	11.350
1	1	0	1	0	0	0	0	0.730	0.866	1.592	6.084	11.646
1	1	1	0	0	0	0	0	0.651	0.773	1.462	5.921	11.478
2	2	1	1	0	0	0	0	1.733	2.233	5.233	25.233	50.233

LAMBDA : 2 1 2 1 0 1 2

NO. MISSING		NO. MISSING IN L4 L5 L6						BAMWA				
								3.00	4.00	10.00	50.00	100.00
0	0	0	0	0	0	0	0	0.548	0.663	1.339	5.789	11.345
1	1	0	0	1	0	0	0	0.730	0.866	1.592	6.084	11.646
1	1	1	0	0	0	0	0	0.730	0.866	1.592	6.084	11.646
2	2	1	0	1	0	1	0	1.733	2.233	5.233	25.233	50.233

LAMBDA : 3 0 2 0 1 1 2

NO. MISSING		NO. MISSING IN L4 L5 L6						BAMWA				
								3.00	4.00	10.00	50.00	100.00
0	0	0	0	0	0	0	0	0.549	0.665	1.342	5.793	11.350
1	1	0	0	1	0	1	0	0.651	0.773	1.462	5.921	11.478
1	1	0	1	0	0	0	0	0.730	0.866	1.592	6.084	11.646
2	2	0	1	1	1	1	0	1.733	2.233	5.233	25.233	50.233

LAMBDA : 3 1 1 0 0 2 2

NO. MISSING	NO. MISSING IN L4 L5 L6					
0	0	0	0	0	0	0
1	0	0	0	1		
2	0	0	0	2		

NO. MISSING	0.50	1.00	2.00	GAUSS	4.00	10.00	50.00	100.00
0	0.241	0.324	0.468	0.598	0.721	1.418	5.884	11.443
1	0.307	0.412	0.583	0.730	0.866	1.592	6.084	11.446
2	0.483	0.733	1.233	1.733	2.233	5.233	25.233	50.233

LAMBDA : 2 1 3 1 0 0 3

NO. MISSING	NO. MISSING IN L4 L5 L6					
0	0	0	0	0	0	0
1	1	0	0			
2	0	0	0			

NO. MISSING	0.50	1.00	2.00	GAUSS	4.00	10.00	50.00	100.00
0	0.246	0.333	0.483	0.613	0.734	1.390	5.435	10.442
1	0.338	0.505	0.838	1.172	1.505	3.505	16.838	33.505

LAMBDA : 3 0 3 0 1 0 3

NO. MISSING	NO. MISSING IN L4 L5 L6					
0	0	0	0	0	0	0
1	0	0	0	1	0	
2	0	0	0	0	0	

NO. MISSING	0.50	1.00	2.00	GAUSS	4.00	10.00	50.00	100.00
0	0.237	0.313	0.442	0.557	0.667	1.289	5.305	10.307
1	0.338	0.505	0.838	1.172	1.505	3.505	16.838	33.505

LAMBDA : 3 1 2 0 0 1 3

NO. MISSING	NO. MISSING IN L4 L5 L6					
0	0	0	0	0	0	0
1	0	0	0	0	0	1
2	0	0	0	0	0	

NO. MISSING	0.50	1.00	2.00	GAUSS	4.00	10.00	50.00	100.00
0	0.246	0.333	0.483	0.613	0.734	1.390	5.435	10.442
1	0.338	0.505	0.838	1.172	1.505	3.505	16.838	33.505

LAMBDA : 3 1 3 0 0 0 4

NO. MISSING	NO. MISSING IN L4 L5 L6					
0	0	0	0	0	0	0
1	0	0	0	0	0	0
2	0	0	0	0	0	0

NO. MISSING	0.50	1.00	2.00	GAUSS	4.00	10.00	50.00	100.00
0	0.264	0.389	0.639	0.889	1.139	2.639	12.639	25.139

[illegible]

LAMBDA : 3 0 1 1 0 3 0

NO. MISSING	NO. MISSING IN						BAMMA			
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0.311	0.451	0.584	0.714	1.476	6.484	12.735
1	1	0	0	0.356	0.494	0.625	0.753	1.512	6.517	12.768
2	2	0	0	0.443	0.696	0.947	1.197	2.699	12.699	25.199
3	3	0	0	0.452	0.590	0.721	0.849	1.604	6.608	12.858
4	4	1	0	0.546	0.805	1.058	1.310	2.814	12.816	25.316
5	5	0	0	0.845	1.122	1.382	1.638	3.149	13.156	25.657
6	6	1	0	0.845	1.122	1.382	1.638	3.149	13.156	25.657

LAMBDA : 4 0 0 0 0 4 0

NO. MISSING	NO. MISSING IN						BAMMA			
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0.389	0.639	0.889	1.139	2.639	12.639	25.139
1	1	0	0	0.443	0.696	0.947	1.197	2.699	12.699	25.199
2	2	0	0	0.546	0.805	1.058	1.310	2.814	12.816	25.316
3	3	0	0	0.845	1.122	1.382	1.638	3.149	13.156	25.657

LAMBDA : 1 0 4 3 0 0 1

NO. MISSING	NO. MISSING IN						BAMMA			
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0.352	0.555	0.756	0.956	2.157	10.158	20.158
1	1	0	0	0.413	0.621	0.825	1.027	2.231	10.233	20.234
2	2	0	0	0.555	0.790	1.006	1.216	2.437	10.450	20.452
3	3	0	0	1.407	2.407	3.407	4.407	10.407	50.407	100.407

LAMBDA : 2 0 3 2 0 1 1

NO. MISSING	NO. MISSING IN						BAMMA			
	L4	L5	L6	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0	0	0	0	0.297	0.421	0.538	0.653	1.328	5.778	11.335
1	1	0	0	0.413	0.621	0.825	1.027	2.231	10.233	20.234
2	2	0	0	0.555	0.790	1.006	1.216	2.437	10.450	20.452
3	3	0	0	1.407	2.407	3.407	4.407	10.407	50.407	100.407

LAMBDA : 3 0 2 1 0 2 1

NO. MISSING	NO. MISSING IN						GAMMA	2.00	1.00	0.50	3.00	4.00	10.00	50.00	100.00
	L4	L5	L6	L4	L5	L6									
0	0	0	0	0	0	0	0.538	0.421	0.297	0.229	0.538	0.653	1.328	5.778	11.335
1	1	0	0	1	0	0	0.607	0.988	0.360	0.283	0.607	0.723	1.399	5.849	11.406
1	1	0	0	0	0	0	0.825	0.421	0.413	0.303	0.825	1.027	2.231	10.233	20.234
2	2	0	0	2	0	0	1.006	0.790	0.555	0.418	1.006	1.216	2.437	10.450	20.452
2	2	1	0	1	0	0	1.006	0.790	0.555	0.418	1.006	1.216	2.437	10.450	20.452
3	3	1	0	2	1	0	3.407	2.407	1.407	0.907	3.407	4.407	10.407	50.407	100.407

LAMBDA : 4 0 1 0 0 3 1

NO. MISSING	NO. MISSING IN						GAMMA	2.00	1.00	0.50	3.00	4.00	10.00	50.00	100.00
	L4	L5	L6	L4	L5	L6									
0	0	0	0	0	0	0	0.756	0.555	0.352	0.250	0.756	0.956	2.157	10.158	20.158
1	1	0	0	1	0	0	0.825	0.621	0.413	0.303	0.825	1.027	2.231	10.233	20.234
2	2	0	0	2	0	0	1.006	0.790	0.555	0.418	1.006	1.216	2.437	10.450	20.452
3	3	0	0	3	0	0	3.407	2.407	1.407	0.907	3.407	4.407	10.407	50.407	100.407

LAMBDA : 2 0 4 2 0 0 2

NO. MISSING	NO. MISSING IN						GAMMA	2.00	1.00	0.50	3.00	4.00	10.00	50.00	100.00
	L4	L5	L6	L4	L5	L6									
0	0	0	0	0	0	0	0.677	0.508	0.334	0.243	0.677	0.846	1.849	8.518	16.852
1	1	0	0	1	0	0	0.794	0.613	0.418	0.308	0.794	0.969	1.988	8.668	17.003
2	2	0	0	2	0	0	1.733	1.233	0.733	0.483	1.733	2.233	5.233	25.233	50.233

LAMBDA : 3 0 3 1 0 1 2

NO. MISSING	NO. MISSING IN						GAMMA	2.00	1.00	0.50	3.00	4.00	10.00	50.00	100.00
	L4	L5	L6	L4	L5	L6									
0	0	0	0	0	0	0	0.525	0.417	0.300	0.231	0.525	0.630	1.241	5.247	10.248
1	1	0	0	1	0	0	0.794	0.613	0.418	0.308	0.794	0.969	1.988	8.668	17.003
1	1	0	0	0	0	0	0.794	0.613	0.418	0.308	0.794	0.969	1.988	8.668	17.003
2	2	1	0	1	0	1	1.733	1.233	0.733	0.483	1.733	2.233	5.233	25.233	50.233

LAMBDA : 4 0 2 0 0 2 2

NO. MISSING	NO. MISSING IN						GAMMA	2.00	1.00	0.50	0.243	0.334	0.508	3.00	4.00	10.00	50.00	100.00
	L4	L5	L6															
0	0	0	0	0	0	0	0.677	0.508	0.334	0.243	0.243	0.334	0.508	0.677	0.846	1.849	8.518	16.852
1	1	0	0	1	0	0	0.794	0.613	0.418	0.308	0.308	0.418	0.613	0.794	0.969	1.988	8.668	17.003
2	2	0	0	2	0	0	1.733	1.233	0.733	0.483	0.483	0.733	1.233	1.733	2.233	5.233	25.233	50.233

LAMBDA : 3 0 4 1 0 0 3

NO. MISSING	NO. MISSING IN						GAMMA	2.00	1.00	0.50	0.246	0.337	0.502	3.00	4.00	10.00	50.00	100.00
	L4	L5	L6															
0	0	0	0	0	0	0	0.656	0.502	0.337	0.246	0.246	0.337	0.502	0.656	0.807	1.680	7.406	14.551
1	1	1	0	0	0	0	1.172	0.838	0.505	0.338	0.338	0.505	0.838	1.172	1.505	3.505	16.838	33.505

LAMBDA : 4 0 3 0 1 3

NO. MISSING	NO. MISSING IN						GAMMA	2.00	1.00	0.50	0.246	0.337	0.502	3.00	4.00	10.00	50.00	100.00
	L4	L5	L6	L4	L5	L6												
0	0	0	0	0	0	0	0.656	0.502	0.337	0.246	0.337	0.502	0.656	0.807	1.680	7.406	14.551	
1	1	0	0	1	0	1	1.172	0.838	0.505	0.338	0.338	0.505	0.838	1.505	3.505	16.838	33.505	

LAMBDA : 4 0 4 0 0 0 4

NO. MISSING	NO. MISSING IN						GAMMA	2.00	1.00	0.50	0.264	0.389	0.639	3.00	4.00	10.00	50.00	100.00
	L4	L5	L6	L4	L5	L6												
0	0	0	0	0	0	0	0.264	0.389	0.639	0.889	1.139	2.639	12.639	25.139				

Appendix 3: Values of \bar{C} for Two Year
Designs , $R = 2, 3, 4, 5$.

The table entry is the value of

$$\bar{C} = \sum_v f_v C_v ,$$

where the sum is taken over all possible replacement designs under replacement strategy I for the design under study (c.f., Section 4). The value of \bar{C} is computed using the indicated variance component ratio γ and probability of segment loss p .

R = 2

LAMBDA STAR : 0 2 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.576	0.814	1.286	3.00	4.00	5.049	23.850	47.350
0.20	0.570	0.798	1.249	1.757	2.228	5.049	23.850	47.350
0.30	0.566	0.788	1.223	1.698	2.146	4.828	22.696	45.029
0.40	0.564	0.781	1.207	1.656	2.087	4.670	21.872	43.372
0.50	0.563	0.779	1.202	1.630	2.052	4.575	21.377	42.378
0.60	0.564	0.781	1.207	1.622	2.040	4.544	21.212	42.046
0.70	0.566	0.788	1.223	1.630	2.052	4.575	21.377	42.378
0.80	0.570	0.798	1.249	1.656	2.087	4.670	21.872	43.372
0.90	0.576	0.814	1.286	1.698	2.146	4.828	22.696	45.029
				1.757	2.228	5.049	23.850	47.350

LAMBDA STAR : 1 1 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.546	0.735	1.097	3.00	4.00	3.912	17.916	35.416
0.20	0.550	0.746	1.123	1.452	1.806	3.912	17.916	35.416
0.30	0.554	0.757	1.150	1.495	1.864	4.070	18.740	37.074
0.40	0.559	0.768	1.176	1.537	1.923	4.228	19.564	38.731
0.50	0.563	0.779	1.202	1.579	1.981	4.386	20.388	40.389
0.60	0.567	0.790	1.228	1.622	2.040	4.544	21.212	42.046
0.70	0.571	0.801	1.255	1.664	2.099	4.702	22.037	43.703
0.80	0.575	0.812	1.281	1.706	2.157	4.859	22.861	45.361
0.90	0.579	0.822	1.307	1.749	2.216	5.017	23.685	47.018
				1.791	2.275	5.175	24.509	48.676

R = 3

LAMBDA STAR : 0 3 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.383	0.539	0.850	1.160	1.470	3.328	15.708	31.182
0.20	0.377	0.526	0.818	1.108	1.397	3.130	14.673	29.100
0.30	0.374	0.515	0.792	1.066	1.339	2.971	13.828	27.397
0.40	0.371	0.509	0.775	1.037	1.298	2.856	13.216	26.163
0.50	0.370	0.506	0.766	1.023	1.277	2.795	12.882	25.486
0.60	0.371	0.506	0.768	1.024	1.278	2.795	12.868	25.455
0.70	0.373	0.512	0.780	1.043	1.304	2.863	13.218	26.158
0.80	0.377	0.521	0.803	1.081	1.358	3.007	13.976	27.683
0.90	0.382	0.536	0.839	1.140	1.440	3.236	15.185	30.119

LAMBDA STAR : 1 2 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.365	0.494	0.743	0.988	1.232	2.686	12.362	24.454
0.20	0.366	0.494	0.740	0.982	1.221	2.651	12.147	24.014
0.30	0.366	0.495	0.742	0.983	1.223	2.648	12.112	23.937
0.40	0.368	0.499	0.749	0.993	1.235	2.678	12.256	24.223
0.50	0.370	0.504	0.760	1.011	1.260	2.742	12.579	24.871
0.60	0.372	0.511	0.776	1.037	1.296	2.838	13.082	25.883
0.70	0.376	0.519	0.797	1.071	1.343	2.968	13.765	27.257
0.80	0.379	0.529	0.823	1.113	1.403	3.131	14.627	28.994
0.90	0.384	0.542	0.854	1.164	1.473	3.327	15.668	31.093

LAMBDA STAR : 2 1 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.365	0.489	0.719	0.941	1.159	2.450	10.991	21.659
0.20	0.368	0.496	0.738	0.972	1.203	2.573	11.646	22.980
0.30	0.370	0.504	0.757	1.003	1.247	2.696	12.302	24.302
0.40	0.373	0.511	0.776	1.035	1.291	2.819	12.957	25.624
0.50	0.376	0.519	0.795	1.066	1.335	2.942	13.612	26.946
0.60	0.378	0.526	0.813	1.097	1.379	3.064	14.268	28.268
0.70	0.381	0.533	0.832	1.128	1.423	3.187	14.923	29.590
0.80	0.384	0.541	0.851	1.160	1.468	3.310	15.578	30.912
0.90	0.386	0.548	0.870	1.191	1.512	3.433	16.234	32.234

R = 4

LAMBDA STAR : 0 4 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.286	0.403	0.635	3.00	4.00	2.484	11.724	23.273
0.20	0.282	0.392	0.609	0.867	1.098	2.484	11.724	23.273
0.30	0.279	0.383	0.587	0.824	1.038	2.323	10.883	21.582
0.40	0.277	0.377	0.571	0.788	0.989	2.187	10.159	20.123
0.50	0.276	0.374	0.562	0.762	0.951	2.080	9.581	18.955
0.60	0.276	0.374	0.561	0.746	0.928	2.010	9.193	18.167
0.70	0.278	0.378	0.569	0.743	0.922	1.988	9.053	17.878
0.80	0.281	0.386	0.588	0.755	0.938	2.027	9.235	18.239
0.90	0.285	0.399	0.588	0.786	0.981	2.140	9.827	19.429
			0.620	0.838	1.055	2.347	10.932	21.658

LAMBDA STAR : 1 3 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.276	0.375	0.570	3.00	4.00	2.098	9.715	19.236
0.20	0.275	0.372	0.560	0.762	0.953	2.098	9.715	19.236
0.30	0.274	0.370	0.554	0.745	0.929	2.025	9.311	18.417
0.40	0.275	0.370	0.552	0.734	0.912	1.972	9.009	17.802
0.50	0.276	0.372	0.556	0.730	0.905	1.945	8.843	17.461
0.60	0.277	0.376	0.564	0.735	0.909	1.951	8.849	17.466
0.70	0.280	0.383	0.579	0.747	0.927	1.994	9.060	17.887
0.80	0.283	0.391	0.601	0.771	0.960	2.082	9.513	18.796
0.90	0.287	0.403	0.630	0.806	1.009	2.219	10.242	20.265
			0.630	0.854	1.078	2.412	11.281	22.365

LAMBDA STAR : 2 2 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.272	0.363	0.536	3.00	4.00	1.854	8.387	16.548
0.20	0.273	0.365	0.539	0.703	0.869	1.854	8.387	16.548
0.30	0.274	0.368	0.545	0.707	0.873	1.854	8.355	16.474
0.40	0.276	0.372	0.554	0.715	0.883	1.877	8.450	16.659
0.50	0.278	0.377	0.565	0.729	0.902	1.922	8.671	17.101
0.60	0.280	0.383	0.580	0.748	0.927	1.990	9.020	17.801
0.70	0.282	0.390	0.597	0.771	0.960	2.080	9.496	18.758
0.80	0.285	0.398	0.618	0.800	1.001	2.193	10.098	19.974
0.90	0.288	0.407	0.641	0.834	1.049	2.328	10.827	21.447
			0.641	0.873	1.104	2.486	11.684	23.178

LAMBDA STAR : 3 1 3

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.276	0.370	0.543	0.707	0.868	1.804	7.957	15.637
0.20	0.278	0.376	0.557	0.731	0.901	1.900	8.480	16.696
0.30	0.279	0.381	0.571	0.754	0.934	1.996	9.004	17.755
0.40	0.281	0.386	0.584	0.777	0.967	2.091	9.527	18.814
0.50	0.283	0.391	0.598	0.800	1.000	2.187	10.050	19.872
0.60	0.285	0.396	0.612	0.824	1.034	2.283	10.574	20.931
0.70	0.286	0.401	0.626	0.847	1.067	2.379	11.097	21.990
0.80	0.288	0.406	0.639	0.870	1.100	2.475	11.620	23.047
0.90	0.290	0.412	0.653	0.893	1.133	2.571	12.143	24.108

R = 5

LAMBDA STAR : 0 5 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.229	0.322	0.507	0.692	0.876	1.982	9.352	18.565
0.20	0.225	0.313	0.485	0.656	0.826	1.849	8.659	17.171
0.30	0.223	0.305	0.466	0.626	0.785	1.734	8.052	15.948
0.40	0.221	0.300	0.453	0.603	0.752	1.640	7.543	14.918
0.50	0.220	0.297	0.444	0.588	0.730	1.573	7.161	14.141
0.60	0.220	0.297	0.442	0.582	0.721	1.540	6.958	13.724
0.70	0.221	0.300	0.448	0.590	0.730	1.557	7.017	13.834
0.80	0.224	0.307	0.463	0.614	0.763	1.643	7.454	14.709
0.90	0.228	0.317	0.490	0.660	0.828	1.824	8.425	16.670

LAMBDA STAR : 1 4 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.222	0.303	0.463	0.622	0.780	1.726	8.027	15.902
0.20	0.220	0.299	0.452	0.603	0.753	1.650	7.618	15.075
0.30	0.219	0.296	0.444	0.589	0.732	1.587	7.266	14.362
0.40	0.219	0.295	0.439	0.580	0.718	1.542	7.000	13.818
0.50	0.220	0.296	0.439	0.577	0.714	1.521	6.857	13.522
0.60	0.221	0.298	0.443	0.583	0.721	1.532	6.887	13.575
0.70	0.223	0.303	0.454	0.599	0.742	1.586	7.152	14.102
0.80	0.225	0.310	0.471	0.628	0.782	1.695	7.723	15.252
0.90	0.229	0.320	0.497	0.672	0.844	1.872	8.685	17.197

LAMBDA STAR : 2 3 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.218	0.293	0.435	0.575	0.715	1.544	7.054	13.941
0.20	0.218	0.292	0.435	0.570	0.705	1.510	6.850	13.521
0.30	0.218	0.293	0.432	0.568	0.701	1.491	6.716	13.243
0.40	0.219	0.294	0.435	0.570	0.704	1.490	6.682	13.166
0.50	0.221	0.297	0.441	0.579	0.714	1.512	6.775	13.346
0.60	0.222	0.302	0.450	0.594	0.734	1.563	7.024	13.842
0.70	0.224	0.307	0.464	0.616	0.765	1.645	7.456	14.711
0.80	0.227	0.314	0.482	0.646	0.807	1.765	8.099	16.011
0.90	0.230	0.323	0.505	0.685	0.863	1.926	8.982	17.799

LAMBDA STAR : 3 2 3

PROB	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0.10	0.218	0.290	0.424	0.553	0.679	1.427	6.362	12.525
0.20	0.219	0.292	0.429	0.559	0.687	1.437	6.386	12.565
0.30	0.220	0.295	0.435	0.568	0.699	1.465	6.510	12.807
0.40	0.221	0.299	0.443	0.581	0.717	1.510	6.732	13.249
0.50	0.223	0.303	0.454	0.598	0.739	1.572	7.052	13.893
0.60	0.225	0.308	0.466	0.618	0.768	1.650	7.471	14.739
0.70	0.227	0.314	0.480	0.642	0.801	1.746	7.989	15.786
0.80	0.229	0.320	0.493	0.669	0.840	1.858	8.605	17.033
0.90	0.231	0.326	0.514	0.699	0.884	1.987	9.320	18.483

LAMBDA STAR : 4 1 4

PROB	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0.10	0.222	0.300	0.440	0.572	0.699	1.438	6.251	12.253
0.20	0.223	0.303	0.450	0.590	0.725	1.515	6.682	13.128
0.30	0.225	0.307	0.461	0.608	0.751	1.592	7.114	14.004
0.40	0.226	0.311	0.471	0.626	0.777	1.670	7.545	14.880
0.50	0.227	0.315	0.482	0.644	0.803	1.747	7.976	15.755
0.60	0.228	0.318	0.492	0.662	0.829	1.824	8.408	16.631
0.70	0.230	0.322	0.502	0.680	0.855	1.901	8.839	17.507
0.80	0.231	0.326	0.513	0.697	0.881	1.979	9.271	18.382
0.90	0.232	0.330	0.523	0.715	0.907	2.056	9.702	19.258

Appendix 4: Values of \bar{C} for Three Year

Designs, $R = 2, 3, 4$.

The table entry is the value of

$$\bar{C} = \sum_v f_v C_v ,$$

where the sum is taken over all possible replacement designs under replacement strategy I for the design under study. The value of \bar{C} is computed using the indicated variance component ratio γ and probability of segment loss p . The three year designs are grouped according to their two year parent design. The value of SS is the number of segments in the parent design.

R = 2 SS = 2
 LAMBDA STAR : 0 2 0

LAMBDA SEQUENCE : 0 0 0 0 2 0 0									
PROB	0.50	1.00	2.00	GAMMA		3.00	4.00	10.00	50.00 100.00
0.10	0.518	0.755	1.226	1.697	2.167	1.697	2.167	4.987	23.788 47.288
0.20	0.511	0.737	1.186	1.633	2.080	1.633	2.080	4.761	22.629 44.962
0.30	0.506	0.724	1.157	1.588	2.019	1.588	2.019	4.600	21.801 43.301
0.40	0.502	0.717	1.140	1.561	1.982	1.561	1.982	4.503	21.304 42.304
0.50	0.501	0.714	1.134	1.552	1.969	1.552	1.969	4.471	21.139 41.972
0.60	0.502	0.717	1.140	1.561	1.982	1.561	1.982	4.503	21.304 42.304
0.70	0.506	0.724	1.157	1.588	2.019	1.588	2.019	4.600	21.801 43.301
0.80	0.511	0.737	1.186	1.633	2.080	1.633	2.080	4.761	22.629 44.962
0.90	0.518	0.755	1.226	1.697	2.167	1.697	2.167	4.987	23.788 47.288

LAMBDA SEQUENCE : 0 1 0 0 1 0 1									
PROB	0.50	1.00	2.00	GAMMA		3.00	4.00	10.00	50.00 100.00
0.10	0.480	0.663	1.019	1.371	1.723	1.371	1.723	3.826	17.827 35.328
0.20	0.486	0.676	1.048	1.417	1.784	1.417	1.784	3.987	18.655 36.989
0.30	0.491	0.688	1.076	1.462	1.846	1.462	1.846	4.148	19.483 38.650
0.40	0.496	0.701	1.105	1.507	1.908	1.507	1.908	4.310	20.311 40.311
0.50	0.501	0.714	1.134	1.552	1.969	1.552	1.969	4.471	21.139 41.972
0.60	0.507	0.727	1.163	1.597	2.031	1.597	2.031	4.632	21.966 43.633
0.70	0.512	0.739	1.191	1.642	2.093	1.642	2.093	4.794	22.794 45.294
0.80	0.517	0.752	1.220	1.687	2.154	1.687	2.154	4.955	23.622 46.956
0.90	0.522	0.765	1.249	1.733	2.216	1.733	2.216	5.116	24.450 48.617

R = 2 SS = 3
 LAMBDA STAR : 1 1 1

LAMBDA SEQUENCE : 0 0 1 1 1 0 0									
PROB	0.50	1.00	2.00	GAMMA		3.00	4.00	10.00	50.00 100.00
0.10	0.483	0.660	0.995	1.321	1.645	3.573	16.378	32.378	32.378
0.20	0.483	0.658	0.988	1.309	1.627	3.517	16.056	31.724	31.724
0.30	0.483	0.660	0.991	1.313	1.631	3.522	16.062	31.730	31.730
0.40	0.486	0.665	1.003	1.332	1.657	3.589	16.396	32.397	32.397
0.50	0.489	0.674	1.025	1.367	1.706	3.717	17.057	33.725	33.725
0.60	0.494	0.687	1.057	1.418	1.776	3.906	18.046	35.714	35.714
0.70	0.500	0.704	1.098	1.484	1.868	4.157	19.362	38.363	38.363
0.80	0.508	0.725	1.148	1.567	1.983	4.469	21.007	41.674	41.674
0.90	0.517	0.749	1.208	1.664	2.119	4.843	22.978	45.645	45.645

LAMBDA SEQUENCE : 0 1 0 1 0 1 0									
PROB	0.50	1.00	2.00	GAMMA		3.00	4.00	10.00	50.00 100.00
0.10	0.473	0.644	0.974	1.299	1.621	3.548	16.352	32.352	32.352
0.20	0.476	0.649	0.977	1.298	1.616	3.506	16.046	31.714	31.714
0.30	0.480	0.656	0.989	1.311	1.631	3.523	16.065	31.733	31.733
0.40	0.485	0.666	1.007	1.338	1.664	3.599	16.408	32.410	32.410
0.50	0.490	0.678	1.033	1.378	1.718	3.733	17.076	33.744	33.744
0.60	0.497	0.693	1.067	1.431	1.791	3.925	18.068	35.736	35.736
0.70	0.503	0.711	1.109	1.498	1.883	4.176	19.384	38.385	38.385
0.80	0.511	0.731	1.157	1.578	1.995	4.485	21.024	41.692	41.692
0.90	0.519	0.753	1.214	1.671	2.127	4.852	22.989	45.656	45.656

LAMBDA SEQUENCE : 1 0 0 0 1 1 0									
PROB	0.50	1.00	2.00	GAMMA		3.00	4.00	10.00	50.00 100.00
0.10	0.483	0.660	0.995	1.321	1.645	3.573	16.378	32.378	32.378
0.20	0.483	0.658	0.988	1.309	1.627	3.517	16.056	31.724	31.724
0.30	0.483	0.660	0.991	1.313	1.631	3.522	16.062	31.730	31.730
0.40	0.486	0.665	1.003	1.332	1.657	3.589	16.396	32.397	32.397
0.50	0.489	0.674	1.025	1.367	1.706	3.717	17.057	33.725	33.725
0.60	0.494	0.687	1.057	1.418	1.776	3.906	18.046	35.714	35.714
0.70	0.500	0.704	1.098	1.484	1.868	4.157	19.362	38.363	38.363
0.80	0.508	0.725	1.148	1.567	1.983	4.469	21.007	41.674	41.674
0.90	0.517	0.749	1.208	1.664	2.119	4.843	22.978	45.645	45.645

LAMBDA SEQUENCE : 0 1 1 1 0 0 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.487	0.660	0.973	1.267	1.554	3.230	14.248	28.000
0.20	0.491	0.673	1.007	1.324	1.634	3.458	15.473	30.476
0.30	0.496	0.686	1.041	1.381	1.715	3.685	16.699	32.951
0.40	0.500	0.700	1.075	1.437	1.795	3.913	17.925	35.426
0.50	0.505	0.713	1.108	1.494	1.876	4.140	19.150	37.901
0.60	0.509	0.726	1.142	1.551	1.956	4.368	20.376	40.377
0.70	0.514	0.739	1.176	1.608	2.037	4.595	21.601	42.852
0.80	0.519	0.752	1.210	1.664	2.117	4.823	22.827	45.327
0.90	0.523	0.765	1.244	1.721	2.197	5.050	24.052	47.803

LAMBDA SEQUENCE : 1 0 1 0 1 0 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.468	0.623	0.914	1.196	1.475	3.134	14.139	27.890
0.20	0.474	0.641	0.955	1.261	1.565	3.372	15.377	30.377
0.30	0.481	0.658	0.995	1.326	1.654	3.610	16.614	32.865
0.40	0.483	0.675	1.035	1.390	1.743	3.848	17.852	35.352
0.50	0.494	0.692	1.076	1.455	1.832	4.087	19.090	37.840
0.60	0.501	0.709	1.116	1.519	1.921	4.325	20.327	40.327
0.70	0.508	0.726	1.157	1.584	2.010	4.563	21.565	42.815
0.80	0.514	0.743	1.197	1.649	2.099	4.801	22.802	45.303
0.90	0.521	0.761	1.237	1.713	2.189	5.040	24.040	47.790

LAMBDA SEQUENCE : 1 1 0 0 0 1 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.487	0.660	0.973	1.267	1.554	3.230	14.248	28.000
0.20	0.491	0.673	1.007	1.324	1.634	3.458	15.473	30.476
0.30	0.496	0.686	1.041	1.381	1.715	3.685	16.699	32.951
0.40	0.500	0.700	1.075	1.437	1.795	3.913	17.925	35.426
0.50	0.505	0.713	1.108	1.494	1.876	4.140	19.150	37.901
0.60	0.509	0.726	1.142	1.551	1.956	4.368	20.376	40.377
0.70	0.514	0.739	1.176	1.608	2.037	4.595	21.601	42.852
0.80	0.519	0.752	1.210	1.664	2.117	4.823	22.827	45.327
0.90	0.523	0.765	1.244	1.721	2.197	5.050	24.052	47.803

R = 2 SS = 4
 LAMBDA STAR : 2 0 2

LAMBDA SEQUENCE :	0	0	2	2	0	0	0	2	
PROB	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00	
0.10	0.520	0.758	1.231	1.702	2.172	4.993	23.794	47.294	
0.20	0.515	0.743	1.194	1.642	2.090	4.772	22.640	44.974	
0.30	0.510	0.732	1.168	1.600	2.031	4.614	21.816	43.316	
0.40	0.508	0.725	1.152	1.575	1.996	4.520	21.322	42.322	
0.50	0.507	0.723	1.147	1.566	1.985	4.488	21.157	41.990	
0.60	0.508	0.725	1.152	1.575	1.996	4.520	21.322	42.322	
0.70	0.510	0.732	1.168	1.600	2.031	4.614	21.816	43.316	
0.80	0.515	0.743	1.194	1.642	2.090	4.772	22.640	44.974	
0.90	0.520	0.758	1.231	1.702	2.172	4.993	23.794	47.294	

LAMBDA SEQUENCE :	1	0	1	1	0	1	0	
PROB	0.50	1.00	2.00	3.00	4.00	10.00	50.00	100.00
0.10	0.460	0.606	0.883	1.155	1.425	3.034	13.736	27.112
0.20	0.467	0.623	0.919	1.210	1.499	3.224	14.693	29.027
0.30	0.474	0.640	0.958	1.269	1.579	3.429	15.732	31.107
0.40	0.481	0.658	0.977	1.332	1.664	3.649	16.851	33.352
0.50	0.488	0.676	1.039	1.397	1.754	3.883	18.053	35.761
0.60	0.496	0.695	1.083	1.467	1.849	4.133	19.335	38.335
0.70	0.504	0.715	1.129	1.539	1.948	4.397	20.699	41.074
0.80	0.512	0.735	1.177	1.615	2.053	4.676	22.144	43.977
0.90	0.520	0.756	1.226	1.695	2.163	4.969	23.670	47.045

LAMBDA SEQUENCE :	2	0	0	0	2	0			
PROB	0.50	1.00	2.00	GAMMA			10.00	50.00	100.00
				3.00	4.00				
0.10	0.520	0.758	1.231	1.702	2.172	4.993	23.794	47.294	
0.20	0.515	0.743	1.194	1.642	2.090	4.772	22.640	44.974	
0.30	0.510	0.732	1.168	1.600	2.031	4.614	21.816	43.316	
0.40	0.508	0.725	1.152	1.575	1.996	4.520	21.322	42.322	
0.50	0.507	0.723	1.147	1.566	1.985	4.488	21.157	41.990	
0.60	0.508	0.725	1.152	1.575	1.996	4.520	21.322	42.322	
0.70	0.510	0.732	1.168	1.600	2.031	4.614	21.816	43.316	
0.80	0.515	0.743	1.194	1.642	2.090	4.772	22.640	44.974	
0.90	0.520	0.758	1.231	1.702	2.172	4.993	23.794	47.294	

LAMBDA SEQUENCE : 1 2 1 0 0 1

PRDB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.491	0.680	1.042	3.00	4.00	3.856	17.860	35.361
0.20	0.495	0.691	1.068	1.397	1.750	4.014	18.684	37.018
0.30	0.499	0.701	1.094	1.439	1.809	4.172	19.508	38.676
0.40	0.503	0.712	1.120	1.482	1.867	4.330	20.333	40.333
0.50	0.507	0.723	1.147	1.524	1.926	4.488	21.157	41.990
0.60	0.511	0.734	1.173	1.566	1.985	4.646	21.981	43.648
0.70	0.515	0.745	1.199	1.608	2.043	4.804	22.805	45.305
0.80	0.520	0.756	1.225	1.651	2.102	4.962	23.629	46.963
0.90	0.524	0.767	1.252	1.693	2.160	5.120	24.454	48.620
				1.735	2.219			

LAMBDA SEQUENCE : 2 0 1 0 0 1 1

PRDB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.491	0.680	1.042	3.00	4.00	3.856	17.860	35.361
0.20	0.495	0.691	1.068	1.397	1.750	4.014	18.684	37.018
0.30	0.499	0.701	1.094	1.439	1.809	4.172	19.508	38.676
0.40	0.503	0.712	1.120	1.482	1.867	4.330	20.333	40.333
0.50	0.507	0.723	1.147	1.524	1.926	4.488	21.157	41.990
0.60	0.511	0.734	1.173	1.566	1.985	4.646	21.981	43.648
0.70	0.515	0.745	1.199	1.608	2.043	4.804	22.805	45.305
0.80	0.520	0.756	1.225	1.651	2.102	4.962	23.629	46.963
0.90	0.524	0.767	1.252	1.693	2.160	5.120	24.454	48.620
				1.735	2.219			

R = 3 SS = 3
 LAMBDA STAR : 0 3 0

LAMBDA SEQUENCE : 0 0 0 0 3 0 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.344	0.500	0.810	3.00	4.00	3.286	15.666	31.140
0.20	0.337	0.484	0.774	1.120	1.429	3.084	14.626	29.053
0.30	0.332	0.472	0.746	1.063	1.352	2.921	13.777	27.346
0.40	0.329	0.463	0.726	1.019	1.291	2.803	13.162	26.108
0.50	0.328	0.460	0.717	0.987	1.247	2.739	12.824	25.429
0.60	0.328	0.460	0.718	0.971	1.224	2.738	12.809	25.396
0.70	0.331	0.466	0.730	0.972	1.235	2.808	13.161	26.100
0.80	0.336	0.478	0.756	0.992	1.252	2.955	13.922	27.629
0.90	0.343	0.495	0.797	1.033	1.308	3.190	15.138	30.072
				1.097	1.396			

LAMBDA SEQUENCE : 0 1 0 0 2 0 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.322	0.447	0.692	3.00	4.00	2.631	12.306	24.397
0.20	0.322	0.446	0.688	0.936	1.178	2.593	12.088	23.955
0.30	0.323	0.448	0.690	0.928	1.166	2.589	12.051	23.876
0.40	0.325	0.451	0.697	0.929	1.167	2.619	12.194	24.161
0.50	0.327	0.457	0.709	0.939	1.180	2.683	12.519	24.811
0.60	0.331	0.465	0.727	0.958	1.205	2.782	13.024	25.824
0.70	0.335	0.475	0.750	0.985	1.243	2.915	13.710	27.202
0.80	0.340	0.487	0.778	1.022	1.293	3.082	14.576	28.943
0.90	0.345	0.502	0.812	1.067	1.356	3.283	15.624	31.049
				1.122	1.431			

LAMBDA SEQUENCE : 0 2 0 0 1 0 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.321	0.439	0.662	3.00	4.00	2.382	10.919	21.586
0.20	0.324	0.447	0.683	0.880	1.096	2.508	11.578	22.912
0.30	0.328	0.456	0.704	0.914	1.143	2.635	12.237	24.238
0.40	0.331	0.465	0.725	0.948	1.190	2.761	12.897	25.564
0.50	0.334	0.474	0.746	0.982	1.237	2.887	13.556	26.889
0.60	0.338	0.483	0.767	1.016	1.284	3.013	14.215	28.215
0.70	0.341	0.492	0.799	1.050	1.331	3.140	14.874	29.541
0.80	0.345	0.501	0.810	1.083	1.378	3.266	15.533	30.867
0.90	0.348	0.510	0.831	1.117	1.425	3.392	16.193	32.193
				1.151	1.472			

R = 3 SS = 4
 LAMBDA STAR : 1 2 1

LAMBDA SEQUENCE : 0 0 1 1 2 0 0									
PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00	
0.10	0.325	0.449	0.690	0.928	1.165	2.581	12.010	23.795	
0.20	0.322	0.442	0.672	0.899	1.124	2.469	11.410	22.584	
0.30	0.320	0.438	0.661	0.880	1.097	2.389	10.970	21.693	
0.40	0.320	0.437	0.657	0.872	1.085	2.350	10.744	21.231	
0.50	0.322	0.439	0.662	0.878	1.092	2.362	10.784	21.305	
0.60	0.324	0.446	0.676	0.900	1.121	2.435	11.144	22.025	
0.70	0.329	0.457	0.701	0.940	1.176	2.578	11.878	23.498	
0.80	0.335	0.472	0.738	0.999	1.258	2.800	13.039	25.833	
0.90	0.342	0.493	0.788	1.080	1.371	3.110	14.679	29.137	

LAMBDA SEQUENCE : 0 1 0 1 1 1 0									
PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00	
0.10	0.320	0.442	0.681	0.918	1.155	2.570	11.999	23.783	
0.20	0.319	0.437	0.667	0.893	1.118	2.463	11.404	22.577	
0.30	0.319	0.436	0.659	0.878	1.095	2.387	10.969	21.692	
0.40	0.320	0.437	0.658	0.873	1.086	2.352	10.747	21.234	
0.50	0.322	0.441	0.665	0.882	1.096	2.368	10.791	21.312	
0.60	0.325	0.448	0.680	0.905	1.127	2.443	11.154	22.035	
0.70	0.330	0.460	0.706	0.946	1.182	2.586	11.888	23.508	
0.80	0.336	0.475	0.742	1.004	1.264	2.807	13.048	25.842	
0.90	0.343	0.495	0.791	1.084	1.375	3.115	14.684	29.142	

LAMBDA SEQUENCE : 1 0 0 0 2 1 0									
PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00	
0.10	0.325	0.449	0.690	0.928	1.165	2.581	12.010	23.795	
0.20	0.322	0.442	0.672	0.895	1.124	2.469	11.410	22.584	
0.30	0.320	0.438	0.661	0.880	1.097	2.389	10.970	21.693	
0.40	0.320	0.437	0.657	0.872	1.085	2.350	10.744	21.231	
0.50	0.322	0.439	0.662	0.878	1.092	2.362	10.784	21.305	
0.60	0.324	0.446	0.676	0.900	1.121	2.435	11.144	22.025	
0.70	0.329	0.457	0.701	0.940	1.176	2.578	11.878	23.498	
0.80	0.335	0.472	0.738	0.999	1.258	2.800	13.039	25.833	
0.90	0.342	0.493	0.788	1.080	1.371	3.110	14.679	29.137	

LAMBDA SEQUENCE : 0 1 1 1 1 0 :

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.316	0.425	0.632	0.832	1.031	2.209	10.027	19.794
0.20	0.317	0.429	0.637	0.838	1.036	2.213	10.005	19.739
0.30	0.320	0.434	0.647	0.852	1.054	2.252	10.178	20.079
0.40	0.322	0.441	0.661	0.874	1.084	2.326	10.547	20.814
0.50	0.326	0.449	0.681	0.905	1.126	2.437	11.110	21.944
0.60	0.330	0.460	0.705	0.944	1.181	2.582	11.868	23.469
0.70	0.335	0.472	0.735	0.992	1.247	2.763	12.822	25.389
0.80	0.340	0.486	0.769	1.048	1.325	2.979	13.970	27.704
0.90	0.346	0.501	0.808	1.112	1.416	3.231	15.313	30.414

LAMBDA SEQUENCE : 0 2 0 1 0 1 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.315	0.424	0.630	0.830	1.029	2.209	10.025	19.793
0.20	0.318	0.429	0.638	0.840	1.039	2.213	10.010	19.744
0.30	0.321	0.436	0.651	0.857	1.061	2.271	10.189	20.090
0.40	0.324	0.444	0.667	0.882	1.093	2.338	10.560	20.828
0.50	0.328	0.453	0.688	0.914	1.137	2.450	11.125	21.960
0.60	0.332	0.464	0.713	0.953	1.191	2.595	11.884	23.485
0.70	0.337	0.476	0.741	1.000	1.256	2.775	12.836	25.404
0.80	0.341	0.489	0.774	1.055	1.333	2.989	13.981	27.715
0.90	0.346	0.503	0.811	1.116	1.420	3.237	15.320	30.420

LAMBDA SEQUENCE : 1 0 1 0 2 0 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.313	0.420	0.624	0.823	1.020	2.196	10.012	19.779
0.20	0.314	0.423	0.627	0.826	1.024	2.197	9.987	19.721
0.30	0.316	0.427	0.636	0.839	1.040	2.235	10.159	20.059
0.40	0.319	0.434	0.651	0.861	1.070	2.309	10.526	20.793
0.50	0.323	0.443	0.671	0.893	1.112	2.419	11.090	21.924
0.60	0.327	0.454	0.696	0.933	1.168	2.566	11.850	23.450
0.70	0.332	0.467	0.727	0.982	1.236	2.749	12.806	25.373
0.80	0.338	0.482	0.763	1.041	1.317	2.969	13.958	27.692
0.90	0.345	0.499	0.805	1.108	1.411	3.226	15.307	30.407

LAMBDA SEQUENCE : 1 1 0 0 1 1 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.316	0.425	0.632	0.832	1.031	2.209	10.027	19.794
0.20	0.317	0.429	0.637	0.838	1.036	2.213	10.005	19.739
0.30	0.320	0.434	0.647	0.852	1.054	2.252	10.178	20.079
0.40	0.322	0.441	0.661	0.874	1.084	2.326	10.547	20.814
0.50	0.326	0.449	0.681	0.905	1.126	2.437	11.110	21.944
0.60	0.330	0.460	0.705	0.944	1.181	2.582	11.868	23.469
0.70	0.335	0.472	0.735	0.992	1.247	2.763	12.822	25.389
0.80	0.340	0.486	0.769	1.048	1.325	2.979	13.970	27.704
0.90	0.346	0.501	0.808	1.112	1.416	3.231	15.313	30.414

LAMBDA SEQUENCE : 0 2 1 1 0 0 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.327	0.446	0.659	0.858	1.051	2.174	9.522	18.691
0.20	0.330	0.454	0.680	0.894	1.103	2.323	10.337	20.339
0.30	0.332	0.462	0.702	0.931	1.155	2.472	11.151	21.986
0.40	0.335	0.470	0.723	0.967	1.207	2.622	11.966	23.634
0.50	0.338	0.478	0.745	1.003	1.259	2.771	12.780	25.281
0.60	0.341	0.486	0.766	1.040	1.311	2.921	13.594	26.929
0.70	0.344	0.494	0.787	1.076	1.363	3.070	14.409	28.576
0.80	0.346	0.502	0.809	1.112	1.415	3.220	15.223	30.224
0.90	0.349	0.510	0.830	1.149	1.467	3.369	16.037	31.871

LAMBDA SEQUENCE : 1 1 1 0 1 0 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.317	0.427	0.627	0.819	1.007	2.118	9.458	18.626
0.20	0.321	0.437	0.652	0.860	1.064	2.274	10.280	20.281
0.30	0.325	0.447	0.677	0.900	1.121	2.429	11.101	21.935
0.40	0.329	0.457	0.702	0.941	1.178	2.585	11.923	23.590
0.50	0.333	0.468	0.727	0.982	1.235	2.741	12.744	25.245
0.60	0.336	0.478	0.752	1.022	1.291	2.896	13.566	26.900
0.70	0.340	0.488	0.777	1.063	1.348	3.052	14.387	28.554
0.80	0.344	0.498	0.802	1.104	1.405	3.207	15.209	30.209
0.90	0.348	0.508	0.827	1.145	1.462	3.363	16.030	31.864

LAMSDA SEQUENCE : 1 2 0 0 0 1 2

PROB	0.50	1.00	2.00	GAMMA			10.00	50.00	100.00
				3.00	4.00				
0.10	0.327	0.446	0.659	0.858	1.051		2.174	9.522	18.691
0.20	0.330	0.454	0.680	0.894	1.103		2.323	10.337	20.339
0.30	0.332	0.462	0.702	0.931	1.155		2.472	11.151	21.986
0.40	0.335	0.470	0.723	0.967	1.207		2.622	11.966	23.634
0.50	0.338	0.478	0.745	1.003	1.259		2.771	12.780	25.281
0.60	0.341	0.486	0.766	1.040	1.311		2.921	13.594	26.929
0.70	0.344	0.494	0.787	1.076	1.363		3.070	14.409	28.576
0.80	0.346	0.502	0.809	1.112	1.415		3.220	15.223	30.224
0.90	0.349	0.510	0.830	1.149	1.467		3.369	16.037	31.871

K = 3 SS = 5
 LAMBDA STAR : 2 1 2

LAMBDA SEQUENCE : 0 0 2 2 1 0 0									
PROB	0.50	1.00	2.00	3.00	GAMMA	4.00	10.00	50.00	100.00
0.10	0.322	0.435	0.642	0.841	1.036	1.036	2.190	9.816	19.342
0.20	0.320	0.431	0.633	0.826	1.014	1.014	2.124	9.444	18.584
0.30	0.320	0.430	0.630	0.819	1.004	1.004	2.088	9.223	18.129
0.40	0.320	0.432	0.633	0.823	1.008	1.008	2.092	9.212	18.097
0.50	0.322	0.436	0.644	0.840	1.031	1.031	2.146	9.470	18.609
0.60	0.325	0.445	0.663	0.871	1.074	1.074	2.261	10.055	19.783
0.70	0.330	0.457	0.693	0.919	1.141	1.141	2.445	11.028	21.741
0.80	0.336	0.471	0.734	0.987	1.236	1.236	2.709	12.445	24.603
0.90	0.343	0.493	0.786	1.074	1.361	1.361	3.064	14.367	28.489

LAMBDA SEQUENCE : 0 1 1 2 0 1 0									
PROB	0.50	1.00	2.00	3.00	GAMMA	4.00	10.00	50.00	100.00
0.10	0.313	0.419	0.620	0.815	1.008	1.008	2.157	9.781	19.306
0.20	0.314	0.420	0.618	0.808	0.995	0.995	2.102	9.420	18.560
0.30	0.316	0.423	0.621	0.809	0.993	0.993	2.076	9.211	18.117
0.40	0.318	0.429	0.629	0.819	1.005	1.005	2.090	9.210	18.096
0.50	0.322	0.436	0.645	0.842	1.033	1.033	2.151	9.476	18.616
0.60	0.326	0.447	0.668	0.877	1.081	1.081	2.271	10.068	19.796
0.70	0.331	0.460	0.699	0.927	1.151	1.151	2.458	11.044	21.758
0.80	0.337	0.476	0.740	0.994	1.245	1.245	2.722	12.461	24.619
0.90	0.344	0.496	0.790	1.080	1.367	1.367	3.072	14.377	28.499

LAMBDA SEQUENCE : 1 0 1 1 1 1 0									
PROB	0.50	1.00	2.00	3.00	GAMMA	4.00	10.00	50.00	100.00
0.10	0.310	0.414	0.612	0.806	0.998	0.998	2.145	9.767	19.292
0.20	0.311	0.414	0.608	0.796	0.982	0.982	2.085	9.401	18.541
0.30	0.312	0.417	0.609	0.795	0.977	0.977	2.056	9.187	18.093
0.40	0.315	0.421	0.617	0.804	0.988	0.988	2.067	9.184	18.069
0.50	0.318	0.429	0.632	0.826	1.015	1.015	2.128	9.349	18.587
0.60	0.323	0.440	0.656	0.862	1.064	1.064	2.248	10.041	19.769
0.70	0.328	0.454	0.689	0.914	1.135	1.135	2.438	11.019	21.732
0.80	0.335	0.472	0.732	0.984	1.233	1.233	2.706	12.441	24.599
0.90	0.343	0.493	0.786	1.074	1.360	1.360	3.063	14.366	28.488

LAMBDA SEQUENCE : 1 1 0 1 0 2 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.313	0.419	0.620	0.815	1.008	2.157	9.781	19.306
0.20	0.314	0.420	0.618	0.808	0.995	2.102	9.420	18.560
0.30	0.316	0.423	0.621	0.809	0.993	2.076	9.211	18.117
0.40	0.318	0.429	0.629	0.819	1.005	2.090	9.210	18.096
0.50	0.322	0.436	0.645	0.842	1.033	2.151	9.476	18.616
0.60	0.326	0.447	0.668	0.877	1.081	2.271	10.068	19.796
0.70	0.331	0.460	0.699	0.927	1.151	2.458	11.044	21.758
0.80	0.337	0.476	0.740	0.994	1.245	2.722	12.461	24.619
0.90	0.344	0.496	0.790	1.080	1.367	3.072	14.377	28.499

LAMBDA SEQUENCE : 2 0 0 0 1 2 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.322	0.435	0.642	0.841	1.036	2.190	9.816	19.342
0.20	0.320	0.431	0.633	0.826	1.014	2.124	9.444	18.574
0.30	0.320	0.430	0.630	0.819	1.004	2.088	9.223	18.129
0.40	0.320	0.432	0.635	0.823	1.008	2.092	9.212	18.097
0.50	0.322	0.436	0.644	0.840	1.031	2.146	9.470	18.609
0.60	0.325	0.445	0.663	0.871	1.074	2.261	10.055	19.783
0.70	0.330	0.457	0.693	0.919	1.141	2.445	11.028	21.741
0.80	0.336	0.473	0.734	0.987	1.236	2.709	12.445	24.603
0.90	0.343	0.493	0.786	1.074	1.361	3.064	14.367	28.489

LAMBDA SEQUENCE : 0 1 2 2 0 0 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.324	0.438	0.638	0.821	0.997	2.010	8.592	16.797
0.20	0.325	0.440	0.643	0.829	1.007	2.032	8.682	16.971
0.30	0.326	0.444	0.652	0.844	1.029	2.090	8.979	17.566
0.40	0.328	0.450	0.667	0.868	1.063	2.185	9.483	18.582
0.50	0.331	0.457	0.686	0.901	1.109	2.316	10.194	20.019
0.60	0.334	0.466	0.710	0.941	1.167	2.484	11.112	21.877
0.70	0.338	0.477	0.738	0.990	1.237	2.688	12.237	24.156
0.80	0.342	0.489	0.771	1.047	1.319	2.928	13.568	26.856
0.90	0.347	0.503	0.809	1.112	1.413	3.205	15.107	29.977

LAMBDA SEQUENCE : 1 0 2 1 1 0 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.311	0.411	0.593	0.765	0.935	1.931	8.500	16.704
0.20	0.313	0.416	0.602	0.779	0.951	1.960	8.598	16.886
0.30	0.316	0.423	0.617	0.800	0.979	2.026	8.904	17.489
0.40	0.320	0.432	0.636	0.830	1.020	2.128	9.417	18.514
0.50	0.324	0.442	0.660	0.869	1.072	2.268	10.137	19.961
0.60	0.328	0.454	0.689	0.915	1.137	2.444	11.065	21.829
0.70	0.333	0.468	0.723	0.970	1.214	2.658	12.201	24.119
0.80	0.339	0.483	0.761	1.034	1.304	2.908	13.544	26.830
0.90	0.345	0.500	0.804	1.105	1.405	3.195	15.094	29.964

LAMBDA SEQUENCE : 1 1 1 1 0 1 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.311	0.410	0.592	0.765	0.934	1.931	8.501	16.705
0.20	0.314	0.418	0.606	0.784	0.957	1.969	8.610	16.898
0.30	0.318	0.427	0.625	0.810	0.991	2.042	8.924	17.510
0.40	0.322	0.437	0.646	0.843	1.035	2.150	9.443	18.541
0.50	0.327	0.448	0.672	0.883	1.090	2.292	10.166	19.990
0.60	0.331	0.460	0.701	0.930	1.155	2.468	11.094	21.858
0.70	0.336	0.473	0.733	0.984	1.230	2.679	12.227	24.145
0.80	0.341	0.488	0.769	1.044	1.316	2.924	13.564	26.851
0.90	0.346	0.503	0.809	1.111	1.412	3.204	15.105	29.975

LAMBDA SEQUENCE : 2 0 1 0 1 1 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.311	0.411	0.593	0.765	0.935	1.931	8.500	16.704
0.20	0.313	0.416	0.602	0.779	0.951	1.960	8.598	16.886
0.30	0.316	0.423	0.617	0.800	0.979	2.026	8.904	17.489
0.40	0.320	0.432	0.636	0.830	1.020	2.128	9.417	18.514
0.50	0.324	0.442	0.660	0.869	1.072	2.268	10.137	19.961
0.60	0.328	0.454	0.689	0.915	1.137	2.444	11.065	21.829
0.70	0.333	0.468	0.723	0.970	1.214	2.658	12.201	24.119
0.80	0.339	0.483	0.761	1.034	1.304	2.908	13.544	26.830
0.90	0.345	0.500	0.804	1.105	1.405	3.195	15.094	29.964

LAMBDA SEQUENCE : 2 1 0 0 2 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.324	0.438	0.638	0.821	0.997	2.010	8.592	16.797
0.20	0.325	0.440	0.643	0.829	1.007	2.032	8.682	16.971
0.30	0.326	0.444	0.652	0.844	1.029	2.090	8.979	17.566
0.40	0.328	0.450	0.667	0.868	1.063	2.185	9.483	18.582
0.50	0.331	0.457	0.686	0.901	1.109	2.316	10.194	20.019
0.60	0.334	0.466	0.710	0.941	1.167	2.484	11.112	21.877
0.70	0.338	0.477	0.738	0.990	1.237	2.688	12.237	24.156
0.80	0.342	0.489	0.771	1.047	1.319	2.928	13.568	26.856
0.90	0.347	0.503	0.809	1.112	1.413	3.205	15.107	29.977

LAMBDA SEQUENCE : 1 1 2 1 0 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.327	0.444	0.650	0.837	1.015	2.027	8.533	16.632
0.20	0.329	0.452	0.672	0.876	1.071	2.193	9.457	18.509
0.30	0.332	0.461	0.695	0.914	1.127	2.358	10.382	20.385
0.40	0.335	0.469	0.717	0.953	1.183	2.524	11.306	22.261
0.50	0.338	0.477	0.740	0.992	1.239	2.690	12.230	24.137
0.60	0.341	0.486	0.762	1.030	1.295	2.856	13.155	26.014
0.70	0.343	0.494	0.784	1.069	1.351	3.021	14.079	27.890
0.80	0.346	0.502	0.807	1.108	1.407	3.187	15.003	29.766
0.90	0.349	0.510	0.829	1.146	1.463	3.353	15.928	31.642

LAMBDA SEQUENCE : 2 0 2 0 1 0 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.315	0.419	0.603	0.776	0.945	1.931	8.417	16.513
0.20	0.319	0.430	0.631	0.822	1.008	2.107	9.354	18.403
0.30	0.323	0.441	0.658	0.867	1.072	2.284	10.291	20.292
0.40	0.327	0.452	0.686	0.912	1.136	2.460	11.228	22.182
0.50	0.331	0.463	0.714	0.958	1.200	2.636	12.166	24.071
0.60	0.335	0.474	0.741	1.003	1.263	2.813	13.103	25.961
0.70	0.340	0.485	0.769	1.049	1.327	2.989	14.040	27.850
0.80	0.344	0.496	0.797	1.094	1.391	3.166	14.977	29.740
0.90	0.348	0.507	0.824	1.140	1.455	3.342	15.915	31.629

LAMBDA SEQUENCE : 2 1 1 0 0 1 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.327	0.444	0.650	0.837	1.015	2.027	8.533	16.632
0.20	0.329	0.452	0.672	0.876	1.071	2.193	9.457	18.509
0.30	0.332	0.461	0.695	0.914	1.127	2.358	10.382	20.385
0.40	0.335	0.469	0.717	0.953	1.183	2.524	11.306	22.261
0.50	0.338	0.477	0.740	0.992	1.239	2.690	12.230	24.137
0.60	0.341	0.486	0.762	1.030	1.295	2.856	13.155	26.014
0.70	0.343	0.494	0.784	1.069	1.351	3.021	14.079	27.890
0.80	0.346	0.502	0.807	1.108	1.407	3.187	15.003	29.766
0.90	0.349	0.510	0.829	1.146	1.463	3.353	15.928	31.642

R = 3 SS = 6
LAMBDA STAR : 3 0 3

LAMBDA SEQUENCE : 0 0 3 3 0 0 0										
PROB	0.50	1.00	2.00	GAMMA		3.00	4.00	10.00	50.00	100.00
0.10	0.346	0.502	0.813	1.123	1.433	1.123	1.433	3.291	15.671	31.145
0.20	0.340	0.489	0.781	1.071	1.360	1.071	1.360	3.093	14.636	29.063
0.30	0.337	0.478	0.755	1.029	1.302	1.029	1.302	2.934	13.791	27.360
0.40	0.334	0.472	0.738	1.000	1.261	1.000	1.261	2.819	13.179	26.126
0.50	0.333	0.469	0.729	0.986	1.240	0.986	1.240	2.758	12.845	25.449
0.60	0.334	0.469	0.731	0.987	1.241	0.987	1.241	2.758	12.831	25.418
0.70	0.336	0.475	0.743	1.006	1.267	1.006	1.267	2.826	13.181	26.121
0.80	0.339	0.484	0.766	1.044	1.320	1.044	1.320	2.970	13.939	27.646
0.90	0.345	0.499	0.802	1.103	1.403	1.103	1.403	3.159	15.148	30.082

LAMBDA SEQUENCE : 1 0 2 2 0 1 0										
PROB	0.50	1.00	2.00	GAMMA			10.00	50.00	100.00	
0.10	0.308	0.406	0.588	0.764	0.938	1.969	8.798	17.330		
0.20	0.311	0.412	0.599	0.781	0.960	2.021	9.056	17.845		
0.30	0.314	0.419	0.614	0.802	0.988	2.091	9.405	18.541		
0.40	0.317	0.427	0.632	0.830	1.025	2.185	9.873	19.477		
0.50	0.321	0.437	0.654	0.864	1.072	2.307	10.490	20.714		
0.60	0.326	0.449	0.681	0.908	1.132	2.462	11.286	22.312		
0.70	0.331	0.463	0.714	0.960	1.204	2.654	12.291	24.331		
0.80	0.337	0.479	0.753	1.023	1.292	2.893	13.534	26.832		
0.90	0.344	0.498	0.799	1.098	1.396	3.179	15.044	29.874		

LAMBDA SEQUENCE : 2 0 1 1 0 2 0										
PROB	0.50	1.00	2.00	GAMMA			10.00	50.00	100.00	
0.10	0.308	0.406	0.588	0.764	0.938	1.969	8.798	17.330		
0.20	0.311	0.412	0.599	0.781	0.960	2.021	9.056	17.845		
0.30	0.314	0.419	0.614	0.802	0.988	2.091	9.405	18.541		
0.40	0.317	0.427	0.632	0.830	1.025	2.185	9.873	19.477		
0.50	0.321	0.437	0.654	0.864	1.072	2.307	10.490	20.714		
0.60	0.326	0.449	0.681	0.908	1.132	2.462	11.286	22.312		
0.70	0.331	0.463	0.714	0.960	1.204	2.656	12.291	24.331		
0.80	0.337	0.479	0.753	1.023	1.292	2.893	13.534	26.832		
0.90	0.344	0.498	0.799	1.098	1.396	3.179	15.044	29.874		

LAMBDA SEQUENCE : 3 0 0 0 0 3 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.346	0.502	0.813	1.123	1.433	3.291	15.671	31.145
0.20	0.340	0.489	0.781	1.071	1.360	3.093	14.636	29.063
0.30	0.337	0.478	0.755	1.029	1.302	2.934	13.791	27.360
0.40	0.334	0.472	0.738	1.000	1.261	2.819	13.179	26.126
0.50	0.333	0.469	0.729	0.986	1.240	2.758	12.845	25.449
0.60	0.334	0.469	0.731	0.987	1.241	2.758	12.831	25.418
0.70	0.336	0.475	0.743	1.006	1.267	2.826	13.181	26.121
0.80	0.339	0.484	0.766	1.044	1.320	2.970	13.939	27.646
0.90	0.345	0.499	0.802	1.103	1.403	3.199	15.148	30.982

LAMBDA SEQUENCE : 1 0 3 2 0 0 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.328	0.457	0.706	0.951	1.195	2.649	12.325	24.417
0.20	0.329	0.457	0.703	0.945	1.184	2.614	12.110	23.977
0.30	0.329	0.458	0.705	0.946	1.186	2.611	12.075	23.900
0.40	0.331	0.462	0.712	0.956	1.198	2.641	12.219	24.186
0.50	0.333	0.467	0.723	0.974	1.223	2.705	12.542	24.834
0.60	0.335	0.473	0.739	1.000	1.259	2.801	13.045	25.846
0.70	0.339	0.482	0.760	1.034	1.306	2.931	13.728	27.220
0.80	0.342	0.492	0.786	1.076	1.366	3.074	14.590	28.957
0.90	0.347	0.505	0.817	1.127	1.436	3.289	15.631	31.056

LAMBDA SEQUENCE : 2 0 2 1 0 1 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.308	0.402	0.572	0.734	0.893	1.831	8.038	15.791
0.20	0.312	0.414	0.597	0.773	0.946	1.967	8.723	17.161
0.30	0.317	0.425	0.624	0.815	1.003	2.116	9.481	18.682
0.40	0.322	0.437	0.652	0.860	1.064	2.277	10.313	20.352
0.50	0.327	0.450	0.682	0.907	1.130	2.452	11.219	22.172
0.60	0.331	0.463	0.713	0.957	1.199	2.639	12.198	24.142
0.70	0.336	0.476	0.745	1.010	1.273	2.840	13.251	26.261
0.80	0.341	0.490	0.779	1.066	1.351	3.053	14.378	28.531
0.90	0.347	0.504	0.815	1.124	1.433	3.279	15.578	30.950

LAMBDA SEQUENCE : 3 0 1 0 0 2 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.328	0.457	0.706	0.951	1.195	2.649	12.325	24.417
0.20	0.329	0.457	0.703	0.945	1.184	2.614	12.110	23.977
0.30	0.329	0.458	0.705	0.946	1.186	2.611	12.075	23.900
0.40	0.331	0.462	0.712	0.956	1.198	2.641	12.219	24.186
0.50	0.333	0.467	0.723	0.974	1.223	2.705	12.542	24.834
0.60	0.335	0.473	0.739	1.000	1.259	2.801	13.045	25.846
0.70	0.339	0.482	0.760	1.034	1.306	2.931	13.728	27.220
0.80	0.342	0.492	0.786	1.076	1.366	3.094	14.590	28.957
0.90	0.347	0.505	0.817	1.127	1.436	3.289	15.631	31.056

LAMBDA SEQUENCE : 2 0 3 1 0 0 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.328	0.452	0.682	0.904	1.122	2.413	10.954	21.622
0.20	0.331	0.459	0.701	0.935	1.166	2.536	11.609	22.943
0.30	0.333	0.467	0.720	0.966	1.210	2.659	12.265	24.265
0.40	0.336	0.474	0.739	0.998	1.254	2.782	12.920	25.587
0.50	0.339	0.481	0.758	1.029	1.298	2.905	13.575	26.909
0.60	0.341	0.489	0.776	1.060	1.342	3.027	14.231	28.231
0.70	0.344	0.496	0.795	1.091	1.386	3.150	14.886	29.553
0.80	0.347	0.504	0.814	1.123	1.430	3.273	15.541	30.875
0.90	0.349	0.511	0.833	1.154	1.474	3.396	16.197	32.197

LAMBDA SEQUENCE : 3 0 2 0 0 1 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.328	0.452	0.682	0.904	1.122	2.413	10.954	21.622
0.20	0.331	0.459	0.701	0.935	1.166	2.536	11.609	22.943
0.30	0.333	0.467	0.720	0.966	1.210	2.659	12.265	24.265
0.40	0.336	0.474	0.739	0.998	1.254	2.782	12.920	25.587
0.50	0.339	0.481	0.758	1.029	1.298	2.905	13.575	26.909
0.60	0.341	0.489	0.776	1.060	1.342	3.027	14.231	28.231
0.70	0.344	0.496	0.795	1.091	1.386	3.150	14.886	29.553
0.80	0.347	0.504	0.814	1.123	1.430	3.273	15.541	30.875
0.90	0.349	0.511	0.833	1.154	1.474	3.396	16.197	32.197

2

R = 4 SS = 4
 LAMBDA STAR : 0 4 0

LAMBDA SEQUENCE :									
PROB	0.50	1.00	2.00	GAMMA	3.00	4.00	10.00	50.00	100.00
0.10	0.257	0.373	0.605	0.836	1.067	2.453	2.453	11.693	23.242
0.20	0.252	0.360	0.576	0.790	1.004	2.289	2.289	10.848	21.547
0.30	0.248	0.350	0.552	0.752	0.952	2.149	2.149	10.120	20.084
0.40	0.245	0.343	0.534	0.723	0.911	2.038	2.038	9.538	18.911
0.50	0.244	0.339	0.523	0.705	0.886	1.966	1.966	9.146	18.120
0.60	0.244	0.339	0.521	0.701	0.879	1.942	1.942	9.004	17.829
0.70	0.246	0.343	0.530	0.713	0.895	1.980	1.980	9.185	18.189
0.80	0.250	0.352	0.551	0.746	0.940	2.096	2.096	9.780	19.382
0.90	0.256	0.367	0.586	0.803	1.019	2.309	2.309	10.891	21.618

LAMBDA SEQUENCE :									
PROB	0.50	1.00	2.00	GAMMA	3.00	4.00	10.00	50.00	100.00
0.10	0.244	0.341	0.533	0.725	0.915	2.059	2.059	9.675	19.196
0.20	0.242	0.337	0.522	0.706	0.888	1.983	1.983	9.268	18.374
0.30	0.242	0.334	0.515	0.693	0.870	1.927	1.927	8.963	17.756
0.40	0.242	0.334	0.512	0.687	0.861	1.899	1.899	8.795	17.412
0.50	0.243	0.336	0.515	0.691	0.865	1.903	1.903	8.798	17.415
0.60	0.245	0.341	0.524	0.704	0.883	1.946	1.946	9.010	17.836
0.70	0.248	0.348	0.540	0.730	0.917	2.036	2.036	9.464	18.747
0.80	0.252	0.358	0.564	0.768	0.970	2.176	2.176	10.197	20.220
0.90	0.257	0.372	0.597	0.820	1.043	2.375	2.375	11.244	22.327

LAMBDA SEQUENCE :									
PROB	0.50	1.00	2.00	GAMMA	3.00	4.00	10.00	50.00	100.00
0.10	0.238	0.326	0.494	0.660	0.825	1.807	1.807	8.337	16.498
0.20	0.239	0.328	0.497	0.662	0.827	1.805	1.805	8.303	16.422
0.30	0.241	0.331	0.503	0.671	0.837	1.827	1.827	8.396	16.605
0.40	0.243	0.336	0.512	0.685	0.856	1.872	1.872	8.618	17.047
0.50	0.246	0.341	0.525	0.704	0.882	1.941	1.941	8.968	17.748
0.60	0.248	0.348	0.541	0.730	0.917	2.033	2.033	9.446	18.708
0.70	0.252	0.357	0.560	0.761	0.960	2.149	2.149	10.052	19.927
0.80	0.255	0.366	0.583	0.798	1.012	2.289	2.289	10.786	21.406
0.90	0.259	0.377	0.609	0.841	1.071	2.452	2.452	11.649	23.143

R = 4 SS = 5
 LAMBDA STAR : 1 3 1

LAMBDA SEQUENCE :	0	0	1	1	3	0	0	
PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.245	0.343	0.533	0.721	0.909	2.034	9.524	18.886
0.20	0.242	0.335	0.515	0.692	0.869	1.925	8.956	17.742
0.30	0.240	0.330	0.501	0.669	0.837	1.835	8.473	16.768
0.40	0.239	0.327	0.493	0.655	0.815	1.771	8.113	16.038
0.50	0.240	0.327	0.491	0.650	0.807	1.741	7.930	15.661
0.60	0.241	0.330	0.497	0.658	0.817	1.759	7.991	15.777
0.70	0.245	0.338	0.513	0.687	0.849	1.838	8.384	16.559
0.80	0.249	0.349	0.540	0.726	0.909	1.997	9.208	18.215
0.90	0.256	0.366	0.581	0.793	1.003	2.257	10.582	20.984

LAMBDA SEQUENCE :	0	1	0	1	2	1	0	
PROB	0.50	1.00	2.00	GAMMA				
				3.00	4.00	10.00	50.00	100.00
0.10	0.243	0.338	0.527	0.715	0.903	2.027	9.517	18.879
0.20	0.240	0.332	0.511	0.688	0.865	1.921	8.951	17.738
0.30	0.239	0.328	0.499	0.668	0.835	1.834	8.472	16.767
0.40	0.239	0.326	0.493	0.655	0.816	1.771	8.114	16.040
0.50	0.240	0.327	0.492	0.652	0.809	1.744	7.933	15.665
0.60	0.242	0.331	0.496	0.661	0.820	1.763	7.997	15.782
0.70	0.245	0.339	0.515	0.686	0.853	1.844	8.390	16.566
0.80	0.250	0.351	0.543	0.729	0.913	2.003	9.214	18.222
0.90	0.256	0.367	0.583	0.795	1.006	2.260	10.586	20.989

LAMBDA SEQUENCE :	1	0	0	0	3	1	0	
PROB	0.50	1.00	2.00	GAMMA				
				3.00	4.00	10.00	50.00	100.00
0.10	0.245	0.343	0.533	0.721	0.909	2.034	9.524	18.886
0.20	0.242	0.335	0.515	0.692	0.869	1.925	8.956	17.742
0.30	0.240	0.330	0.501	0.669	0.837	1.835	8.473	16.768
0.40	0.239	0.327	0.493	0.655	0.815	1.771	8.113	16.038
0.50	0.240	0.327	0.491	0.650	0.807	1.741	7.930	15.661
0.60	0.241	0.330	0.497	0.658	0.817	1.759	7.991	15.777
0.70	0.245	0.338	0.513	0.687	0.849	1.838	8.384	16.559
0.80	0.249	0.349	0.540	0.726	0.909	1.997	9.208	18.215
0.90	0.256	0.366	0.581	0.793	1.003	2.257	10.582	20.984

LAMBDA SEQUENCE : 0 1 1 1 2 0 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.237	0.323	0.488	0.650	0.811	1.773	8.168	16.160
0.20	0.237	0.322	0.483	0.641	0.797	1.726	7.896	15.606
0.30	0.238	0.323	0.482	0.637	0.790	1.699	7.725	15.252
0.40	0.239	0.325	0.486	0.641	0.794	1.699	7.693	15.179
0.50	0.241	0.330	0.494	0.653	0.809	1.733	7.840	15.467
0.60	0.244	0.336	0.509	0.675	0.839	1.807	8.205	16.197
0.70	0.248	0.345	0.529	0.708	0.884	1.927	8.829	17.448
0.80	0.252	0.357	0.558	0.754	0.948	2.102	9.749	19.302
0.90	0.258	0.371	0.594	0.814	1.032	2.337	11.006	21.839

LAMBDA SEQUENCE : 0 2 0 1 1 1 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.236	0.321	0.486	0.647	0.808	1.770	8.165	16.157
0.20	0.237	0.322	0.483	0.640	0.796	1.726	7.896	15.606
0.30	0.238	0.323	0.483	0.638	0.792	1.701	7.728	15.255
0.40	0.240	0.326	0.488	0.644	0.797	1.704	7.698	15.185
0.50	0.242	0.331	0.497	0.657	0.814	1.739	7.847	15.475
0.60	0.245	0.338	0.512	0.680	0.844	1.814	8.214	16.206
0.70	0.249	0.347	0.533	0.713	0.890	1.935	8.837	17.457
0.80	0.253	0.359	0.561	0.758	0.953	2.108	9.757	19.310
0.90	0.258	0.373	0.596	0.816	1.035	2.341	11.011	21.844

LAMBDA SEQUENCE : 1 0 1 0 3 0 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.237	0.323	0.487	0.649	0.809	1.771	8.166	16.158
0.20	0.237	0.321	0.481	0.638	0.794	1.722	7.892	15.602
0.30	0.237	0.321	0.479	0.633	0.786	1.694	7.718	15.246
0.40	0.238	0.323	0.482	0.636	0.788	1.692	7.685	15.171
0.50	0.240	0.327	0.490	0.647	0.803	1.725	7.830	15.457
0.60	0.243	0.333	0.504	0.669	0.832	1.798	8.195	16.186
0.70	0.246	0.343	0.525	0.703	0.878	1.919	8.819	17.438
0.80	0.251	0.355	0.554	0.750	0.943	2.095	9.741	19.294
0.90	0.257	0.370	0.592	0.811	1.029	2.333	11.001	21.834

LAMBDA SEQUENCE : 1 1 0 0 2 1 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.237	0.323	0.488	3.00	4.00	1.773	8.168	16.160
0.20	0.237	0.322	0.483	0.650	0.811	1.726	7.896	15.606
0.30	0.238	0.323	0.482	0.637	0.797	1.699	7.725	15.252
0.40	0.239	0.325	0.486	0.641	0.790	1.699	7.693	15.179
0.50	0.241	0.330	0.494	0.653	0.809	1.733	7.840	15.467
0.60	0.244	0.336	0.509	0.675	0.839	1.807	8.205	16.197
0.70	0.248	0.345	0.529	0.708	0.884	1.927	8.829	17.448
0.80	0.252	0.357	0.558	0.754	0.948	2.102	9.749	19.302
0.90	0.258	0.371	0.594	0.814	1.032	2.337	11.006	21.839

LAMBDA SEQUENCE : 0 2 1 1 1 0 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.237	0.319	0.471	3.00	4.00	1.613	7.246	14.282
0.20	0.239	0.323	0.478	0.617	0.761	1.629	7.293	14.365
0.30	0.241	0.328	0.487	0.626	0.771	1.670	7.478	14.729
0.40	0.243	0.333	0.500	0.640	0.790	1.736	7.800	15.373
0.50	0.246	0.340	0.516	0.659	0.816	1.825	8.262	16.298
0.60	0.249	0.348	0.534	0.684	0.850	1.939	8.861	17.505
0.70	0.252	0.357	0.556	0.714	0.892	2.078	9.598	18.992
0.80	0.256	0.366	0.581	0.750	0.942	2.240	10.474	20.760
0.90	0.260	0.377	0.608	0.791	0.999	2.427	11.487	22.809

LAMBDA SEQUENCE : 0 3 0 1 0 1 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.238	0.321	0.473	3.00	4.00	1.617	7.251	14.287
0.20	0.240	0.325	0.482	0.620	0.765	1.637	7.302	14.374
0.30	0.243	0.331	0.493	0.631	0.777	1.680	7.490	14.741
0.40	0.245	0.337	0.506	0.647	0.797	1.747	7.814	15.387
0.50	0.248	0.344	0.522	0.667	0.824	1.837	8.276	16.313
0.60	0.251	0.351	0.540	0.692	0.859	1.951	8.875	17.519
0.70	0.254	0.360	0.561	0.722	0.900	2.088	9.610	19.004
0.80	0.257	0.369	0.584	0.757	0.949	2.248	10.483	20.769
0.90	0.260	0.378	0.610	0.796	1.005	2.432	11.492	22.814

LAMBDA SEQUENCE : 1 1 1 0 2 0 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.235	0.315	0.464	0.609	0.752	1.602	7.234	14.270
0.20	0.236	0.318	0.470	0.617	0.761	1.516	7.278	14.350
0.30	0.239	0.323	0.479	0.630	0.779	1.516	7.461	14.712
0.40	0.241	0.329	0.492	0.649	0.805	1.721	7.783	15.356
0.50	0.244	0.336	0.508	0.675	0.839	1.811	8.245	16.281
0.60	0.247	0.344	0.527	0.706	0.882	1.926	8.846	17.489
0.70	0.251	0.353	0.550	0.743	0.933	2.067	9.585	18.979
0.80	0.255	0.364	0.576	0.786	0.993	2.232	10.464	20.750
0.90	0.259	0.376	0.606	0.834	1.062	2.423	11.482	22.804

LAMBDA SEQUENCE : 1 2 0 0 1 1 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.237	0.319	0.471	0.617	0.761	1.613	7.246	14.282
0.20	0.239	0.323	0.478	0.626	0.771	1.629	7.293	14.365
0.30	0.241	0.328	0.487	0.640	0.790	1.670	7.478	14.729
0.40	0.243	0.333	0.500	0.659	0.816	1.736	7.800	15.373
0.50	0.246	0.340	0.516	0.684	0.850	1.825	8.262	16.298
0.60	0.249	0.348	0.534	0.714	0.892	1.939	8.861	17.505
0.70	0.252	0.357	0.556	0.750	0.942	2.078	9.598	18.992
0.80	0.256	0.366	0.581	0.791	0.999	2.240	10.474	20.760
0.90	0.260	0.377	0.608	0.837	1.065	2.427	11.487	22.809

LAMBDA SEQUENCE : 0 3 1 1 0 0 3

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.248	0.340	0.505	0.658	0.806	1.654	7.171	14.049
0.20	0.249	0.346	0.520	0.684	0.843	1.764	7.779	15.281
0.30	0.251	0.351	0.535	0.709	0.880	1.873	8.386	16.513
0.40	0.253	0.356	0.550	0.735	0.917	1.983	8.994	17.746
0.50	0.255	0.362	0.565	0.761	0.954	2.092	9.601	18.978
0.60	0.257	0.367	0.579	0.786	0.991	2.201	10.209	20.210
0.70	0.258	0.373	0.594	0.812	1.028	2.311	10.816	21.442
0.80	0.260	0.378	0.609	0.838	1.065	2.420	11.424	22.674
0.90	0.262	0.383	0.624	0.863	1.102	2.529	12.031	23.907

LAMBDA SEQUENCE : 1 2 1 0 1 0 3

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.241	0.327	0.483	0.630	0.773	1.611	7.119	13.995
0.20	0.244	0.334	0.500	0.659	0.814	1.725	7.733	15.234
0.30	0.246	0.341	0.518	0.687	0.854	1.839	8.346	16.472
0.40	0.249	0.348	0.535	0.716	0.895	1.953	8.959	17.710
0.50	0.251	0.355	0.552	0.745	0.936	2.068	9.572	18.948
0.60	0.254	0.362	0.570	0.774	0.976	2.182	10.186	20.186
0.70	0.256	0.368	0.587	0.803	1.017	2.296	10.799	21.424
0.80	0.259	0.375	0.604	0.831	1.058	2.410	11.412	22.663
0.90	0.261	0.382	0.622	0.860	1.098	2.525	12.026	23.901

LAMBDA SEQUENCE : 1 3 0 0 1 3

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.248	0.340	0.505	0.658	0.806	1.654	7.171	14.049
0.20	0.249	0.346	0.520	0.684	0.843	1.764	7.779	15.281
0.30	0.251	0.351	0.535	0.709	0.880	1.873	8.386	16.513
0.40	0.253	0.356	0.550	0.735	0.917	1.983	8.994	17.746
0.50	0.255	0.362	0.565	0.761	0.954	2.092	9.601	18.978
0.60	0.257	0.367	0.579	0.786	0.991	2.201	10.209	20.210
0.70	0.258	0.373	0.594	0.812	1.028	2.311	10.816	21.442
0.80	0.260	0.378	0.609	0.838	1.065	2.420	11.424	22.674
0.90	0.262	0.383	0.624	0.863	1.102	2.529	12.031	23.907

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LAMBDA SEQUENCE : 0 0 2 2 2 0 0									
PROB	0.50	1.00	2.00	GAMMA		3.00	4.00	10.00	50.00 100.00
0.10	0.240	0.327	0.491	0.651	0.810	0.651	0.810	1.759	8.061 15.937
0.20	0.238	0.322	0.479	0.632	0.784	0.632	0.784	1.684	7.655 15.117
0.30	0.237	0.320	0.472	0.619	0.764	0.619	0.764	1.625	7.321 14.438
0.40	0.238	0.319	0.469	0.613	0.755	0.613	0.755	1.589	7.101 13.983
0.50	0.239	0.322	0.473	0.617	0.758	0.617	0.758	1.588	7.052 13.873
0.60	0.241	0.327	0.484	0.633	0.779	0.633	0.779	1.633	7.250 14.262
0.70	0.245	0.336	0.504	0.664	0.821	0.664	0.821	1.741	7.790 15.340
0.80	0.249	0.349	0.535	0.714	0.891	0.714	0.891	1.930	8.780 17.333
0.90	0.256	0.366	0.579	0.788	0.994	0.788	0.994	2.221	10.348 20.501

LAMBDA SEQUENCE : 0 1 1 2 1 1 0									
PROB	0.50	1.00	2.00	GAMMA		3.00	4.00	10.00	50.00 100.00
0.10	0.236	0.320	0.482	0.641	0.800	0.641	0.800	1.747	8.049 15.924
0.20	0.236	0.318	0.473	0.626	0.777	0.626	0.777	1.676	7.647 15.109
0.30	0.236	0.317	0.468	0.615	0.760	0.615	0.760	1.620	7.317 14.434
0.40	0.237	0.318	0.468	0.612	0.754	0.612	0.754	1.589	7.100 13.983
0.50	0.239	0.322	0.474	0.618	0.760	0.618	0.760	1.590	7.055 13.877
0.60	0.242	0.328	0.486	0.636	0.782	0.636	0.782	1.638	7.257 14.269
0.70	0.245	0.338	0.507	0.668	0.826	0.668	0.826	1.748	7.798 15.349
0.80	0.250	0.350	0.538	0.719	0.896	0.719	0.896	1.937	8.789 17.342
0.90	0.256	0.367	0.581	0.791	0.998	0.791	0.998	2.226	10.354 20.507

LAMBDA SEQUENCE : 0 2 0 2 0 2 0									
PROB	0.50	1.00	2.00	GAMMA		3.00	4.00	10.00	50.00 100.00
0.10	0.235	0.318	0.479	0.638	0.796	0.638	0.796	1.743	8.044 15.920
0.20	0.235	0.317	0.472	0.624	0.775	0.624	0.775	1.674	7.646 15.107
0.30	0.236	0.317	0.469	0.616	0.761	0.616	0.761	1.621	7.319 14.435
0.40	0.237	0.319	0.470	0.615	0.757	0.615	0.757	1.592	7.105 13.988
0.50	0.240	0.324	0.477	0.622	0.764	0.622	0.764	1.596	7.062 13.884
0.60	0.243	0.330	0.490	0.641	0.788	0.641	0.788	1.646	7.266 14.278
0.70	0.247	0.340	0.511	0.674	0.832	0.674	0.832	1.756	7.809 15.360
0.80	0.251	0.353	0.542	0.724	0.902	0.724	0.902	1.944	8.798 17.352
0.90	0.257	0.369	0.584	0.794	1.002	0.794	1.002	2.231	10.361 20.514

LAMBDA SEQUENCE : 1 0 1 1 2 1 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.236	0.320	0.481	0.640	0.799	1.745	8.047	15.922
0.20	0.235	0.316	0.471	0.623	0.774	1.672	7.643	15.105
0.30	0.235	0.315	0.465	0.612	0.756	1.615	7.311	14.427
0.40	0.236	0.316	0.464	0.607	0.748	1.581	7.092	13.975
0.50	0.237	0.319	0.469	0.612	0.753	1.582	7.045	13.866
0.60	0.240	0.325	0.481	0.630	0.775	1.629	7.246	14.257
0.70	0.244	0.335	0.502	0.662	0.819	1.738	7.787	15.337
0.80	0.249	0.348	0.534	0.713	0.890	2.28	8.779	17.332
0.90	0.256	0.366	0.579	0.787	0.994	2.221	10.348	20.500

LAMBDA SEQUENCE : 1 1 0 1 1 2 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.236	0.320	0.482	0.641	0.800	1.747	8.049	15.924
0.20	0.236	0.318	0.473	0.626	0.777	1.676	7.647	15.109
0.30	0.236	0.317	0.468	0.615	0.760	1.620	7.317	14.434
0.40	0.237	0.318	0.468	0.612	0.754	1.589	7.100	13.983
0.50	0.239	0.322	0.474	0.618	0.760	1.590	7.055	13.877
0.60	0.242	0.328	0.486	0.636	0.782	1.638	7.257	14.269
0.70	0.245	0.338	0.507	0.668	0.826	1.748	7.798	15.349
0.80	0.250	0.350	0.538	0.719	0.896	1.937	8.789	17.342
0.90	0.256	0.367	0.581	0.791	0.998	2.226	10.354	20.507

LAMBDA SEQUENCE : 2 0 0 0 2 2 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.240	0.327	0.491	0.651	0.810	1.759	8.061	15.937
0.20	0.238	0.322	0.479	0.632	0.784	1.684	7.655	15.117
0.30	0.237	0.320	0.472	0.619	0.764	1.625	7.321	14.438
0.40	0.238	0.319	0.469	0.613	0.755	1.589	7.101	13.983
0.50	0.239	0.322	0.473	0.617	0.758	1.588	7.052	13.873
0.60	0.241	0.327	0.484	0.633	0.779	1.633	7.250	14.262
0.70	0.245	0.336	0.504	0.664	0.821	1.741	7.790	15.340
0.80	0.249	0.349	0.535	0.714	0.891	1.930	8.780	17.333
0.90	0.256	0.366	0.579	0.788	0.994	2.221	10.348	20.501

LAMBDA SEQUENCE : 0 1 2 2 1 0 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.237	0.318	0.467	0.610	0.750	1.584	7.099	13.988
0.20	0.237	0.318	0.466	0.606	0.744	1.556	6.914	13.606
0.30	0.238	0.320	0.468	0.608	0.745	1.548	6.831	13.426
0.40	0.240	0.324	0.475	0.617	0.756	1.567	6.891	13.536
0.50	0.242	0.329	0.486	0.634	0.779	1.620	7.138	14.022
0.60	0.245	0.336	0.503	0.661	0.815	1.714	7.612	14.971
0.70	0.249	0.346	0.526	0.679	0.867	1.856	8.357	16.470
0.80	0.253	0.358	0.556	0.748	0.937	2.053	9.415	18.607
0.90	0.258	0.372	0.593	0.811	1.027	2.312	10.828	21.467

LAMBDA SEQUENCE : 0 2 1 2 0 1 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.235	0.313	0.460	0.602	0.742	1.574	7.088	13.977
0.20	0.236	0.316	0.462	0.602	0.739	1.551	6.909	13.600
0.30	0.238	0.319	0.467	0.607	0.744	1.547	6.831	13.426
0.40	0.240	0.324	0.476	0.619	0.758	1.571	6.896	13.540
0.50	0.243	0.330	0.489	0.638	0.783	1.627	7.146	14.030
0.60	0.246	0.338	0.507	0.666	0.821	1.723	7.623	14.982
0.70	0.250	0.348	0.531	0.704	0.874	1.866	8.368	16.482
0.80	0.254	0.360	0.560	0.753	0.943	2.061	9.425	18.617
0.90	0.259	0.373	0.596	0.814	1.031	2.317	10.835	21.474

LAMBDA SEQUENCE : 1 0 2 1 2 0 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.233	0.311	0.456	0.597	0.737	1.568	7.081	13.970
0.20	0.234	0.311	0.455	0.594	0.730	1.539	6.895	13.586
0.30	0.235	0.314	0.458	0.596	0.731	1.531	6.811	13.406
0.40	0.237	0.318	0.465	0.605	0.742	1.550	6.871	13.515
0.50	0.239	0.323	0.477	0.623	0.766	1.603	7.118	14.001
0.60	0.243	0.331	0.495	0.651	0.803	1.699	7.593	14.952
0.70	0.247	0.342	0.519	0.690	0.857	1.843	8.341	16.453
0.80	0.252	0.355	0.551	0.742	0.930	2.043	9.402	18.594
0.90	0.257	0.370	0.591	0.808	1.023	2.306	10.821	21.460

LAMBDA SEQUENCE : 1 1 1 1 1 1 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.233	0.310	0.455	0.596	0.735	1.566	7.079	13.968
0.20	0.234	0.312	0.456	0.594	0.731	1.541	6.897	13.588
0.30	0.236	0.315	0.460	0.599	0.735	1.535	6.817	13.412
0.40	0.238	0.320	0.468	0.610	0.748	1.557	6.890	13.524
0.50	0.241	0.326	0.482	0.629	0.773	1.613	7.129	14.013
0.60	0.244	0.334	0.500	0.657	0.811	1.709	7.606	14.965
0.70	0.248	0.345	0.524	0.696	0.865	1.853	8.353	16.467
0.80	0.253	0.357	0.555	0.747	0.936	2.052	9.413	18.605
0.90	0.258	0.372	0.593	0.811	1.027	2.311	16.828	21.467

LAMBDA SEQUENCE : 1 2 0 1 0 2 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.235	0.313	0.460	0.602	0.742	1.574	7.088	13.977
0.20	0.236	0.316	0.462	0.602	0.739	1.551	6.909	13.600
0.30	0.238	0.319	0.467	0.607	0.744	1.547	6.831	13.426
0.40	0.240	0.324	0.476	0.619	0.758	1.571	6.896	13.540
0.50	0.243	0.330	0.489	0.638	0.783	1.627	7.146	14.030
0.60	0.246	0.338	0.507	0.666	0.821	1.723	7.623	14.982
0.70	0.250	0.348	0.531	0.704	0.874	1.866	8.368	16.482
0.80	0.254	0.360	0.560	0.753	0.943	2.061	9.425	18.617
0.90	0.259	0.373	0.596	0.814	1.031	2.317	10.835	21.474

LAMBDA SEQUENCE : 2 0 1 0 2 1 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.233	0.311	0.456	0.597	0.737	1.568	7.081	13.970
0.20	0.234	0.311	0.455	0.594	0.730	1.539	6.895	13.586
0.30	0.235	0.314	0.458	0.596	0.731	1.531	6.811	13.406
0.40	0.237	0.318	0.465	0.605	0.742	1.550	6.871	13.515
0.50	0.239	0.323	0.477	0.623	0.766	1.603	7.118	14.001
0.60	0.243	0.331	0.495	0.651	0.803	1.699	7.593	14.952
0.70	0.247	0.342	0.519	0.690	0.857	1.843	8.341	16.453
0.80	0.252	0.355	0.551	0.742	0.930	2.043	9.402	18.594
0.90	0.257	0.370	0.591	0.808	1.023	2.306	10.821	21.460

LAMBDA SEQUENCE : 2 1 0 0 1 2 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.237	0.318	0.467	0.610	0.750	1.584	7.099	13.988
0.20	0.237	0.318	0.466	0.606	0.744	1.556	6.914	13.606
0.30	0.238	0.320	0.468	0.608	0.745	1.548	6.831	13.426
0.40	0.240	0.324	0.475	0.617	0.756	1.537	6.891	13.536
0.50	0.242	0.329	0.465	0.634	0.779	1.620	7.138	14.022
0.60	0.245	0.336	0.503	0.661	0.815	1.714	7.612	14.971
0.70	0.249	0.346	0.526	0.699	0.867	1.856	8.357	16.470
0.80	0.253	0.358	0.556	0.748	0.937	2.053	9.415	15.607
0.90	0.258	0.372	0.593	0.811	1.027	2.312	10.828	21.467

LAMBDA SEQUENCE : 0 2 2 2 0 0 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.242	0.326	0.474	0.610	0.742	1.503	6.466	12.655
0.20	0.243	0.329	0.481	0.621	0.755	1.530	6.567	12.847
0.30	0.245	0.334	0.491	0.636	0.776	1.581	6.814	13.337
0.40	0.247	0.339	0.503	0.657	0.804	1.657	7.208	14.127
0.50	0.249	0.345	0.519	0.682	0.841	1.759	7.747	15.215
0.60	0.251	0.352	0.537	0.713	0.885	1.885	8.433	16.602
0.70	0.254	0.360	0.558	0.749	0.937	2.036	9.265	18.288
0.80	0.257	0.368	0.582	0.791	0.996	2.212	10.244	20.273
0.90	0.260	0.378	0.609	0.837	1.064	2.413	11.368	22.556

LAMBDA SEQUENCE : 1 1 2 1 1 0 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.235	0.313	0.452	0.583	0.712	1.465	6.422	12.610
0.20	0.237	0.317	0.461	0.595	0.727	1.493	6.525	12.804
0.30	0.240	0.323	0.472	0.613	0.750	1.547	6.775	13.297
0.40	0.242	0.329	0.487	0.636	0.781	1.627	7.172	14.090
0.50	0.245	0.337	0.505	0.665	0.821	1.732	7.716	15.182
0.60	0.248	0.345	0.526	0.699	0.868	1.863	8.406	16.574
0.70	0.252	0.355	0.550	0.738	0.924	2.019	9.244	18.266
0.80	0.256	0.365	0.576	0.783	0.987	2.200	10.229	20.257
0.90	0.260	0.377	0.606	0.833	1.059	2.407	11.360	22.548

LAMBDA SEQUENCE : 1 2 1 1 0 1 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.237	0.315	0.455	0.587	0.716	1.471	6.429	12.618
0.20	0.239	0.320	0.466	0.602	0.735	1.504	6.538	12.817
0.30	0.242	0.327	0.479	0.622	0.760	1.562	6.792	13.315
0.40	0.244	0.334	0.495	0.646	0.793	1.643	7.191	14.110
0.50	0.247	0.341	0.513	0.675	0.833	1.749	7.736	15.204
0.60	0.250	0.350	0.534	0.709	0.880	1.879	8.426	16.595
0.70	0.254	0.358	0.556	0.747	0.934	2.033	9.261	18.284
0.80	0.257	0.368	0.581	0.790	0.995	2.211	10.242	20.271
0.90	0.260	0.378	0.609	0.837	1.063	2.413	11.368	22.556

LAMBDA SEQUENCE : 2 0 2 0 2 0 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.232	0.306	0.442	0.571	0.698	1.448	6.402	12.590
0.20	0.234	0.311	0.450	0.582	0.712	1.474	6.502	12.781
0.30	0.237	0.316	0.462	0.599	0.734	1.527	6.750	13.272
0.40	0.239	0.323	0.477	0.623	0.766	1.606	7.147	14.064
0.50	0.243	0.331	0.495	0.652	0.806	1.712	7.691	15.158
0.60	0.246	0.340	0.517	0.687	0.855	1.845	8.384	16.552
0.70	0.250	0.351	0.542	0.729	0.913	2.003	9.226	18.247
0.80	0.254	0.362	0.571	0.776	0.979	2.189	10.215	20.243
0.90	0.259	0.375	0.603	0.829	1.055	2.401	11.353	22.541

LAMBDA SEQUENCE : 2 1 1 0 1 1 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.235	0.313	0.452	0.583	0.712	1.465	6.422	12.610
0.20	0.237	0.317	0.461	0.595	0.727	1.493	6.525	12.804
0.30	0.240	0.323	0.472	0.613	0.750	1.547	6.775	13.297
0.40	0.242	0.329	0.467	0.636	0.781	1.627	7.172	14.090
0.50	0.245	0.337	0.505	0.665	0.821	1.732	7.716	15.182
0.60	0.248	0.345	0.526	0.699	0.868	1.863	8.406	16.574
0.70	0.252	0.355	0.550	0.738	0.924	2.019	9.244	18.266
0.80	0.256	0.365	0.576	0.783	0.987	2.209	10.229	20.257
0.90	0.260	0.377	0.606	0.833	1.059	2.407	11.360	22.548

LAMBDA SEQUENCE : 2 2 0 0 0 2 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.242	0.326	0.474	3.00	4.00	1.503	6.466	12.615
0.20	0.243	0.329	0.481	0.610	0.742	1.530	6.567	12.847
0.30	0.245	0.334	0.491	0.621	0.755	1.581	6.814	13.337
0.40	0.247	0.339	0.503	0.636	0.776	1.657	7.208	14.127
0.50	0.249	0.345	0.519	0.657	0.804	1.759	7.747	15.215
0.60	0.251	0.352	0.537	0.682	0.841	1.885	8.433	16.602
0.70	0.254	0.360	0.558	0.713	0.885	2.036	9.265	18.288
0.80	0.257	0.368	0.582	0.749	0.937	2.212	10.244	20.273
0.90	0.260	0.378	0.609	0.791	0.996	2.413	11.368	22.556
				0.837	1.064			

LAMBDA SEQUENCE : 1 2 2 1 0 0 3

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.247	0.339	0.499	3.00	4.00	1.567	6.592	12.845
0.20	0.249	0.344	0.515	0.645	0.783	1.686	7.264	14.211
0.30	0.251	0.350	0.530	0.672	0.823	1.805	7.935	15.577
0.40	0.253	0.356	0.546	0.699	0.862	1.924	8.607	16.943
0.50	0.255	0.361	0.561	0.726	0.902	2.043	9.279	18.309
0.60	0.257	0.367	0.577	0.753	0.941	2.162	9.951	19.675
0.70	0.258	0.372	0.592	0.780	0.981	2.281	10.623	21.041
0.80	0.260	0.378	0.608	0.807	1.020	2.401	11.295	22.407
0.90	0.262	0.383	0.623	0.835	1.060	2.520	11.967	23.773
				0.862	1.099			

LAMBDA SEQUENCE : 2 1 2 0 1 0 3

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.240	0.324	0.471	3.00	4.00	1.507	6.518	12.770
0.20	0.243	0.331	0.490	0.608	0.740	1.633	7.198	14.144
0.30	0.246	0.338	0.508	0.639	0.784	1.758	7.878	15.518
0.40	0.248	0.345	0.527	0.670	0.829	1.884	8.558	16.893
0.50	0.251	0.353	0.546	0.702	0.873	2.010	9.238	18.267
0.60	0.253	0.360	0.564	0.733	0.917	2.136	9.919	19.641
0.70	0.256	0.367	0.583	0.764	0.962	2.262	10.599	21.016
0.80	0.259	0.374	0.602	0.795	1.006	2.387	11.279	22.390
0.90	0.261	0.382	0.620	0.826	1.050	2.513	11.959	23.765
				0.858	1.095			

LAMBDA SEQUENCE : 2 2 1 0 0 1 3

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.247	0.339	0.499	0.645	0.783	1.567	6.592	12.845
0.20	0.249	0.344	0.515	0.672	0.823	1.686	7.264	14.211
0.30	0.251	0.350	0.530	0.699	0.862	1.805	7.935	15.577
0.40	0.253	0.356	0.546	0.726	0.902	1.924	8.607	16.943
0.50	0.255	0.361	0.561	0.753	0.941	2.043	9.279	18.309
0.60	0.257	0.367	0.577	0.780	0.981	2.162	9.951	19.675
0.70	0.258	0.372	0.592	0.807	1.020	2.281	10.623	21.041
0.80	0.260	0.378	0.608	0.835	1.060	2.401	11.295	22.407
0.90	0.262	0.383	0.623	0.862	1.099	2.520	11.967	23.773

R = 4 SS = 7
 LAMBDA STAR : 3 1 3

LAMBDA SEQUENCE : 0 0 3 3 1 0 0										
PROB	0.50	1.00	2.00	GAMMA			10.00	50.00	100.00	
				3.00	4.00					
0.10	0.243	0.328	0.482	0.628	0.769		1.598	7.045	13.844	
0.20	0.241	0.324	0.473	0.613	0.750		1.543	6.743	13.231	
0.30	0.240	0.322	0.468	0.605	0.737		1.502	6.504	12.743	
0.40	0.240	0.322	0.468	0.603	0.733		1.485	6.375	12.471	
0.50	0.241	0.324	0.473	0.610	0.742		1.500	6.417	12.543	
0.60	0.243	0.330	0.485	0.629	0.767		1.562	6.710	13.124	
0.70	0.246	0.338	0.506	0.662	0.814		1.687	7.354	14.417	
0.80	0.251	0.351	0.537	0.714	0.887		1.893	8.465	16.660	
0.90	0.257	0.367	0.580	0.788	0.993		2.202	10.176	20.130	

LAMBDA SEQUENCE : 0 1 2 3 0 1 0										
PROB	0.50	1.00	2.00	GAMMA			10.00	50.00	100.00	
0.10	0.236	0.315	0.462	0.603	0.742	1.564	7.007	13.806		
0.20	0.236	0.315	0.458	0.595	0.729	1.518	6.715	13.203		
0.30	0.237	0.316	0.458	0.592	0.723	1.486	6.486	12.724		
0.40	0.238	0.318	0.462	0.596	0.725	1.476	6.365	12.461		
0.50	0.240	0.323	0.471	0.608	0.740	1.498	6.415	12.542		
0.60	0.243	0.330	0.486	0.630	0.769	1.566	6.716	13.130		
0.70	0.247	0.340	0.509	0.666	0.819	1.695	7.365	14.428		
0.80	0.251	0.353	0.541	0.719	0.893	1.902	8.477	16.673		
0.90	0.257	0.369	0.583	0.792	0.998	2.209	10.185	20.139		

LAMBDA SEQUENCE : 1 0 2 2 1 1 0											
PROB	0.50	1.00	2.00	GAMMA			3.00	4.00	10.00	50.00	100.00
0.10	0.232	0.308	0.450	0.589	0.727	0.589	0.727	1.546	6.987	13.786	
0.20	0.232	0.307	0.446	0.581	0.713	0.581	0.713	1.498	6.691	13.179	
0.30	0.233	0.308	0.446	0.577	0.706	0.577	0.706	1.464	6.460	12.698	
0.40	0.235	0.312	0.450	0.581	0.709	0.581	0.709	1.453	6.339	12.434	
0.50	0.237	0.317	0.460	0.593	0.723	0.593	0.723	1.476	6.388	12.514	
0.60	0.240	0.325	0.476	0.617	0.754	0.617	0.754	1.545	6.690	13.104	
0.70	0.245	0.335	0.500	0.655	0.806	0.655	0.806	1.676	7.342	14.404	
0.80	0.250	0.349	0.534	0.711	0.887	0.711	0.887	1.887	8.458	16.654	
0.90	0.256	0.367	0.580	0.787	0.992	0.787	0.992	2.200	10.174	20.128	

LAMBDA SEQUENCE : 1 1 1 2 0 2 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.231	0.306	0.448	0.586	0.724	1.543	6.983	13.781
0.20	0.232	0.307	0.446	0.580	0.712	1.497	6.691	13.179
0.30	0.233	0.309	0.447	0.579	0.708	1.467	6.464	12.702
0.40	0.235	0.313	0.453	0.585	0.713	1.460	6.347	12.442
0.50	0.238	0.319	0.464	0.599	0.730	1.486	6.401	12.527
0.60	0.242	0.328	0.481	0.624	0.763	1.557	6.706	13.120
0.70	0.246	0.338	0.506	0.663	0.815	1.689	7.359	14.421
0.80	0.251	0.352	0.539	0.717	0.891	1.899	8.474	16.670
0.90	0.257	0.369	0.583	0.792	0.997	2.208	10.184	20.139

LAMBDA SEQUENCE : 2 0 1 1 2 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.232	0.308	0.450	0.589	0.727	1.546	6.987	13.786
0.20	0.232	0.307	0.446	0.581	0.713	1.498	6.691	13.179
0.30	0.233	0.308	0.446	0.577	0.706	1.468	6.460	12.698
0.40	0.235	0.312	0.450	0.581	0.709	1.453	6.339	12.434
0.50	0.237	0.317	0.460	0.593	0.723	1.476	6.388	12.514
0.60	0.240	0.325	0.476	0.617	0.754	1.545	6.690	13.104
0.70	0.245	0.335	0.500	0.655	0.806	1.676	7.342	14.404
0.80	0.250	0.349	0.534	0.711	0.883	1.887	8.458	16.654
0.90	0.256	0.367	0.580	0.787	0.992	2.200	10.174	20.128

LAMBDA SEQUENCE : 2 1 0 1 0 3 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.236	0.315	0.462	0.603	0.742	1.564	7.007	13.806
0.20	0.236	0.315	0.458	0.595	0.729	1.518	6.715	13.203
0.30	0.237	0.316	0.458	0.592	0.723	1.486	6.486	12.724
0.40	0.238	0.318	0.462	0.596	0.725	1.476	6.365	12.461
0.50	0.240	0.323	0.471	0.608	0.740	1.498	6.415	12.542
0.60	0.243	0.330	0.486	0.630	0.769	1.566	6.716	13.130
0.70	0.247	0.340	0.509	0.666	0.819	1.695	7.365	14.428
0.80	0.251	0.353	0.541	0.719	0.893	1.902	8.477	16.673
0.90	0.257	0.369	0.583	0.792	0.998	2.209	10.185	20.139

LAMBDA SEQUENCE : 3 0 0 0 1 3 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.243	0.328	0.482	0.628	0.769	1.598	7.045	13.844
0.20	0.241	0.324	0.473	0.613	0.750	1.543	6.743	13.231
0.30	0.240	0.322	0.468	0.605	0.737	1.502	6.504	12.743
0.40	0.240	0.322	0.468	0.603	0.733	1.485	6.375	12.471
0.50	0.241	0.324	0.473	0.610	0.742	1.500	6.417	12.543
0.60	0.243	0.330	0.485	0.629	0.767	1.562	6.710	13.124
0.70	0.246	0.338	0.506	0.662	0.814	1.687	7.354	14.417
0.80	0.251	0.351	0.537	0.714	0.887	1.893	8.465	16.660
0.90	0.257	0.367	0.580	0.788	0.993	2.202	10.176	20.130

LAMBDA SEQUENCE : 0 1 3 3 0 0 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.245	0.332	0.485	0.624	0.757	1.511	6.374	12.431
0.20	0.244	0.331	0.482	0.619	0.750	1.490	6.243	12.160
0.30	0.244	0.331	0.483	0.620	0.751	1.489	6.215	12.095
0.40	0.245	0.333	0.488	0.628	0.762	1.515	6.334	12.328
0.50	0.246	0.337	0.498	0.644	0.784	1.576	6.645	12.951
0.60	0.248	0.343	0.513	0.670	0.820	1.677	7.193	14.057
0.70	0.251	0.351	0.534	0.705	0.872	1.828	8.021	15.736
0.80	0.255	0.361	0.561	0.753	0.940	2.033	9.175	18.082
0.90	0.259	0.374	0.596	0.814	1.029	2.301	10.700	21.185

LAMBDA SEQUENCE : 1 0 3 2 1 0 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.235	0.312	0.450	0.580	0.706	1.445	6.297	12.352
0.20	0.236	0.314	0.451	0.580	0.705	1.430	6.172	12.087
0.30	0.237	0.316	0.456	0.586	0.711	1.436	6.151	12.029
0.40	0.239	0.321	0.465	0.599	0.727	1.468	6.277	12.269
0.50	0.242	0.327	0.478	0.619	0.755	1.535	6.595	12.900
0.60	0.245	0.335	0.497	0.649	0.796	1.644	7.151	14.014
0.70	0.248	0.345	0.522	0.690	0.853	1.801	7.988	15.702
0.80	0.253	0.357	0.553	0.742	0.928	2.015	9.152	18.058
0.90	0.258	0.372	0.592	0.808	1.022	2.292	10.688	21.173

LAMBDA SEQUENCE : 1 1 2 2 0 1 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.232	0.306	0.440	0.567	0.692	1.427	6.276	12.330
0.20	0.234	0.310	0.445	0.572	0.696	1.420	6.160	12.075
0.30	0.237	0.315	0.453	0.583	0.708	1.432	6.148	12.026
0.40	0.239	0.321	0.465	0.600	0.729	1.471	6.282	12.274
0.50	0.242	0.328	0.481	0.624	0.760	1.544	6.607	12.912
0.60	0.246	0.337	0.502	0.656	0.804	1.656	7.167	14.030
0.70	0.250	0.347	0.527	0.697	0.862	1.815	8.006	15.721
0.80	0.254	0.359	0.558	0.749	0.936	2.027	9.168	18.075
0.90	0.259	0.373	0.595	0.813	1.028	2.300	10.698	21.183

LAMBDA SEQUENCE : 2 0 2 1 1 1 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.230	0.301	0.431	0.557	0.680	1.413	6.259	12.314
0.20	0.231	0.304	0.435	0.560	0.683	1.402	6.139	12.054
0.30	0.234	0.309	0.443	0.570	0.693	1.412	6.123	12.001
0.40	0.236	0.315	0.455	0.586	0.713	1.449	6.254	12.246
0.50	0.240	0.322	0.471	0.610	0.744	1.521	6.578	12.883
0.60	0.243	0.332	0.492	0.643	0.789	1.634	7.139	14.002
0.70	0.248	0.343	0.519	0.686	0.849	1.795	7.981	15.695
0.80	0.252	0.356	0.552	0.741	0.926	2.012	9.149	19.054
0.90	0.258	0.371	0.592	0.808	1.022	2.291	10.687	21.172

LAMBDA SEQUENCE : 2 1 1 1 0 2 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.232	0.306	0.440	0.567	0.692	1.427	6.276	12.330
0.20	0.234	0.310	0.445	0.572	0.696	1.420	6.160	12.075
0.30	0.237	0.315	0.453	0.583	0.708	1.432	6.148	12.026
0.40	0.239	0.321	0.465	0.600	0.729	1.471	6.282	12.274
0.50	0.242	0.328	0.481	0.624	0.760	1.544	6.607	12.912
0.60	0.246	0.337	0.502	0.656	0.804	1.656	7.167	14.030
0.70	0.250	0.347	0.527	0.697	0.862	1.815	8.006	15.721
0.80	0.254	0.359	0.558	0.749	0.936	2.027	9.168	18.075
0.90	0.259	0.373	0.595	0.813	1.028	2.300	10.698	21.183

LAMBDA SEQUENCE : 3 0 1 0 1 2 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.235	0.312	0.450	0.580	0.706	1.445	6.297	12.352
0.20	0.236	0.314	0.451	0.580	0.705	1.430	6.172	12.087
0.30	0.237	0.316	0.456	0.586	0.711	1.436	6.151	12.029
0.40	0.239	0.321	0.465	0.599	0.727	1.468	6.277	12.269
0.50	0.242	0.327	0.478	0.619	0.755	1.535	6.595	12.900
0.60	0.245	0.335	0.497	0.649	0.796	1.644	7.151	14.014
0.70	0.248	0.345	0.522	0.690	0.853	1.801	7.980	15.702
0.80	0.253	0.357	0.553	0.742	0.928	2.015	9.152	18.058
0.90	0.258	0.372	0.592	0.808	1.022	2.292	10.688	21.173

LAMBDA SEQUENCE : 3 1 0 0 3 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.245	0.332	0.485	0.624	0.757	1.511	6.374	12.431
0.20	0.244	0.331	0.482	0.619	0.750	1.490	6.243	12.160
0.30	0.244	0.331	0.483	0.620	0.751	1.489	6.215	12.095
0.40	0.245	0.333	0.488	0.628	0.762	1.515	6.334	12.328
0.50	0.246	0.337	0.498	0.644	0.784	1.576	6.645	12.951
0.60	0.248	0.343	0.513	0.670	0.820	1.677	7.193	14.057
0.70	0.251	0.351	0.534	0.705	0.872	1.828	8.021	15.736
0.80	0.255	0.361	0.561	0.753	0.940	2.033	9.175	18.082
0.90	0.259	0.374	0.596	0.814	1.029	2.301	10.700	21.185

LAMBDA SEQUENCE : 1 1 3 2 0 0 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.242	0.327	0.472	0.603	0.728	1.425	5.871	11.400
0.20	0.244	0.330	0.479	0.614	0.742	1.457	6.011	11.671
0.30	0.245	0.334	0.489	0.630	0.764	1.516	6.303	12.255
0.40	0.247	0.339	0.52	0.652	0.794	1.600	6.749	13.154
0.50	0.249	0.345	0.518	0.678	0.832	1.709	7.348	14.366
0.60	0.252	0.352	0.536	0.710	0.878	1.844	8.100	15.893
0.70	0.254	0.360	0.558	0.747	0.931	2.004	9.005	17.733
0.80	0.257	0.369	0.582	0.789	0.993	2.190	10.063	19.888
0.90	0.260	0.378	0.609	0.836	1.062	2.402	11.275	22.354

LAMBDA SEQUENCE : 2 0 3 1 1 0 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.234	0.308	0.438	3.00	4.00	1.355	5.786	11.312
0.20	0.236	0.313	0.449	0.559	0.676	1.393	5.932	11.589
0.30	0.239	0.320	0.463	0.575	0.696	1.458	6.232	12.181
0.40	0.242	0.327	0.479	0.595	0.723	1.548	6.685	13.088
0.50	0.245	0.335	0.499	0.621	0.758	1.665	7.293	14.309
0.60	0.248	0.344	0.521	0.652	0.801	1.808	8.054	15.846
0.70	0.251	0.354	0.546	0.689	0.853	1.976	8.970	17.697
0.80	0.255	0.365	0.574	0.731	0.912	2.171	10.039	19.863
0.90	0.260	0.376	0.605	0.778	0.980	2.392	11.262	22.343
				0.831	1.055			

LAMBDA SEQUENCE : 2 1 2 1 0 1 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.235	0.310	0.442	3.00	4.00	1.361	5.793	11.320
0.20	0.238	0.317	0.455	0.563	0.681	1.407	5.949	11.608
0.30	0.241	0.324	0.471	0.583	0.705	1.477	6.257	12.207
0.40	0.244	0.332	0.489	0.606	0.736	1.571	6.715	13.118
0.50	0.247	0.340	0.509	0.634	0.774	1.689	7.324	14.342
0.60	0.250	0.349	0.530	0.666	0.818	1.831	8.085	15.877
0.70	0.253	0.358	0.554	0.702	0.869	1.997	8.997	17.725
0.80	0.257	0.368	0.581	0.742	0.926	2.187	10.060	19.884
0.90	0.260	0.378	0.609	0.787	0.990	2.401	11.274	22.355
				0.836	1.061			

LAMBDA SEQUENCE : 3 0 2 0 1 1 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
0.10	0.234	0.308	0.438	3.00	4.00	1.355	5.786	11.312
0.20	0.236	0.313	0.449	0.559	0.676	1.393	5.932	11.589
0.30	0.239	0.320	0.463	0.575	0.696	1.458	6.232	12.181
0.40	0.242	0.327	0.479	0.595	0.723	1.548	6.685	13.088
0.50	0.245	0.335	0.499	0.621	0.758	1.665	7.293	14.309
0.60	0.248	0.344	0.521	0.652	0.801	1.808	8.054	15.846
0.70	0.252	0.354	0.546	0.689	0.853	1.976	8.970	17.697
0.80	0.255	0.365	0.574	0.731	0.912	2.171	10.039	19.863
0.90	0.260	0.376	0.605	0.778	0.980	2.392	11.262	22.343
				0.831	1.055			

LAMBDA SEQUENCE : 3 1 1 0 0 2 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.242	0.327	0.472	0.603	0.728	1.425	5.871	11.400
0.20	0.244	0.330	0.479	0.614	0.742	1.457	6.011	11.671
0.30	0.245	0.334	0.489	0.630	0.764	1.516	6.303	12.255
0.40	0.247	0.339	0.502	0.652	0.794	1.600	6.749	13.154
0.50	0.249	0.345	0.518	0.678	0.832	1.709	7.348	14.366
0.60	0.252	0.352	0.536	0.710	0.878	1.844	8.100	15.893
0.70	0.254	0.360	0.558	0.747	0.931	2.004	9.005	17.733
0.80	0.257	0.369	0.582	0.789	0.993	2.190	10.063	19.888
0.90	0.260	0.378	0.609	0.836	1.062	2.402	11.275	22.356

LAMBDA SEQUENCE : 2 1 3 1 0 0 3

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.247	0.339	0.498	0.641	0.775	1.515	6.155	11.911
0.20	0.249	0.345	0.514	0.668	0.815	1.640	6.876	13.381
0.30	0.251	0.350	0.529	0.696	0.856	1.764	7.596	14.851
0.40	0.253	0.356	0.545	0.724	0.896	1.889	8.316	16.321
0.50	0.255	0.361	0.561	0.751	0.937	2.014	9.037	17.790
0.60	0.257	0.367	0.576	0.779	0.977	2.139	9.757	19.260
0.70	0.258	0.372	0.592	0.806	1.018	2.264	10.478	20.730
0.80	0.260	0.378	0.608	0.834	1.058	2.389	11.198	22.199
0.90	0.262	0.383	0.623	0.861	1.098	2.514	11.918	23.669

LAMBDA SEQUENCE : 3 0 3 0 1 0 3

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.240	0.321	0.462	0.591	0.714	1.424	6.038	11.790
0.20	0.242	0.328	0.481	0.624	0.761	1.559	6.771	13.273
0.30	0.245	0.336	0.501	0.657	0.809	1.694	7.505	14.756
0.40	0.248	0.344	0.521	0.690	0.856	1.829	8.238	16.240
0.50	0.250	0.351	0.540	0.723	0.903	1.964	8.972	17.723
0.60	0.253	0.359	0.560	0.756	0.950	2.099	9.705	19.206
0.70	0.256	0.366	0.580	0.789	0.997	2.234	10.439	20.689
0.80	0.259	0.374	0.600	0.823	1.045	2.369	11.172	22.172
0.90	0.261	0.381	0.619	0.856	1.092	2.504	11.905	23.656

LAMBDA SEQUENCE : 3 1 2 0 0 1 3

PROB	0.50	1.00	2.00	GAMMA			10.00	50.00	100.00
				3.00	4.00				
0.10	0.247	0.339	0.498	0.641	0.775		1.515	6.155	11.911
0.20	0.249	0.345	0.514	0.668	0.815		1.640	6.876	13.381
0.30	0.251	0.350	0.529	0.696	0.856		1.764	7.596	14.851
0.40	0.253	0.356	0.545	0.724	0.896		1.889	8.316	16.321
0.50	0.255	0.361	0.561	0.751	0.937		2.014	9.037	17.790
0.60	0.257	0.367	0.576	0.779	0.977		2.139	9.757	19.260
0.70	0.258	0.372	0.592	0.806	1.018		2.264	10.478	20.730
0.80	0.260	0.378	0.608	0.834	1.058		2.389	11.198	22.199
0.90	0.262	0.383	0.623	0.861	1.098		2.514	11.918	23.669

R = 4 SS = 8
LAMBDA STAR : 4 0 4

LAMBDA SEQUENCE : 0 0 4 4 0 0 0										
PROB	0.50	1.00	2.00	GAMMA			10.00	50.00	100.00	
0.10	0.259	0.375	0.607	0.839	1.070	2.457	11.696	23.245		
0.20	0.254	0.364	0.581	0.796	1.010	2.296	10.856	21.555		
0.30	0.251	0.356	0.559	0.760	0.961	2.159	10.132	20.095		
0.40	0.249	0.350	0.543	0.734	0.923	2.052	9.553	18.927		
0.50	0.248	0.346	0.534	0.718	0.900	1.983	9.165	18.139		
0.60	0.248	0.347	0.533	0.715	0.895	1.961	9.025	17.850		
0.70	0.250	0.351	0.541	0.727	0.911	1.999	9.207	18.211		
0.80	0.253	0.359	0.560	0.758	0.953	2.113	9.799	19.401		
0.90	0.258	0.371	0.592	0.810	1.027	2.319	10.904	21.631		

LAMBDA SEQUENCE : 1 0 3 3 0 1 0										
PROB	0.50	1.00	2.00	GAMMA			10.00	50.00	100.00	
				3.00	4.00					
0.10	0.234	0.311	0.453	0.587	0.720		1.497	6.621	13.017	
0.20	0.235	0.313	0.456	0.592	0.727		1.518	6.738	13.256	
0.30	0.236	0.315	0.461	0.600	0.737		1.543	6.869	13.520	
0.40	0.238	0.319	0.469	0.612	0.752		1.581	7.055	13.891	
0.50	0.240	0.325	0.481	0.630	0.776		1.640	7.346	14.471	
0.60	0.243	0.332	0.497	0.656	0.812		1.730	7.798	15.375	
0.70	0.247	0.342	0.520	0.692	0.862		1.862	8.476	16.737	
0.80	0.252	0.355	0.551	0.741	0.930		2.048	9.454	18.705	
0.90	0.257	0.370	0.590	0.806	1.021		2.302	10.812	21.445	

LAMBDA SEQUENCE : 2 0 2 2 0 2 0										
PROB	0.50	1.00	2.00	GAMMA			10.00	50.00	100.00	
0.10	0.228	0.297	0.425	0.549	0.672	1.401	6.240	12.285		
0.20	0.229	0.300	0.429	0.553	0.675	1.398	6.184	12.161		
0.30	0.232	0.304	0.437	0.563	0.687	1.420	6.261	12.308		
0.40	0.234	0.310	0.448	0.580	0.709	1.469	6.482	12.742		
0.50	0.238	0.318	0.465	0.605	0.742	1.548	6.864	13.503		
0.60	0.242	0.328	0.486	0.638	0.787	1.662	7.440	14.655		
0.70	0.246	0.340	0.514	0.681	0.846	1.819	8.249	16.278		
0.80	0.251	0.353	0.547	0.736	0.922	2.027	9.342	18.479		
0.90	0.257	0.370	0.589	0.805	1.019	2.296	10.781	21.384		

LAMBDA SEQUENCE : 3 0 1 1 0 3 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.234	0.311	0.453	0.587	0.720	1.497	6.621	13.017
0.20	0.235	0.313	0.456	0.592	0.727	1.518	6.738	13.256
0.30	0.236	0.315	0.461	0.600	0.737	1.543	6.869	13.520
0.40	0.238	0.319	0.469	0.612	0.752	1.581	7.055	13.891
0.50	0.240	0.325	0.481	0.630	0.776	1.640	7.346	14.471
0.60	0.243	0.332	0.497	0.656	0.812	1.730	7.798	15.375
0.70	0.247	0.342	0.520	0.692	0.862	1.862	8.476	16.737
0.80	0.252	0.355	0.551	0.741	0.930	2.048	9.454	18.705
0.90	0.257	0.370	0.590	0.806	1.021	2.302	10.812	21.445

LAMBDA SEQUENCE : 4 0 0 0 0 4 0

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.259	0.375	0.607	0.839	1.070	2.457	11.696	23.245
0.20	0.254	0.364	0.581	0.796	1.010	2.296	10.856	21.555
0.30	0.251	0.356	0.559	0.760	0.961	2.159	10.132	20.095
0.40	0.249	0.350	0.543	0.734	0.923	2.052	9.553	18.927
0.50	0.248	0.346	0.534	0.718	0.900	1.983	9.165	18.139
0.60	0.248	0.347	0.533	0.715	0.895	1.961	9.025	17.850
0.70	0.250	0.351	0.541	0.727	0.911	1.999	9.207	18.211
0.80	0.253	0.359	0.560	0.758	0.953	2.113	9.799	19.401
0.90	0.258	0.371	0.592	0.810	1.027	2.319	10.994	21.631

LAMBDA SEQUENCE : 1 0 4 3 0 0 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.248	0.348	0.542	0.734	0.925	2.070	9.687	19.296
0.20	0.247	0.344	0.532	0.717	0.901	1.997	9.284	18.390
0.30	0.247	0.343	0.526	0.706	0.884	1.944	8.981	17.774
0.40	0.247	0.343	0.525	0.702	0.877	1.918	8.816	17.433
0.50	0.248	0.345	0.528	0.706	0.881	1.923	8.821	17.438
0.60	0.249	0.349	0.537	0.719	0.899	1.966	9.033	17.859
0.70	0.252	0.355	0.551	0.743	0.932	2.054	9.485	18.769
0.80	0.255	0.364	0.573	0.778	0.982	2.191	10.214	20.238
0.90	0.259	0.375	0.602	0.827	1.050	2.384	11.254	22.337

LAMBDA SEQUENCE : 2 0 3 2 0 1 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.231	0.302	0.430	0.551	0.669	1.367	5.965	11.706
0.20	0.233	0.307	0.440	0.567	0.690	1.417	6.204	12.182
0.30	0.236	0.314	0.454	0.587	0.717	1.481	6.518	12.807
0.40	0.239	0.321	0.470	0.611	0.749	1.563	6.928	13.626
0.50	0.242	0.329	0.488	0.641	0.790	1.667	7.456	14.684
0.60	0.246	0.338	0.511	0.676	0.838	1.797	8.124	16.027
0.70	0.250	0.349	0.536	0.718	0.897	1.955	8.955	17.698
0.80	0.254	0.361	0.566	0.767	0.965	2.146	9.970	19.744
0.90	0.259	0.374	0.600	0.824	1.046	2.372	11.190	22.209

LAMBDA SEQUENCE : 3 0 2 1 0 2 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.231	0.302	0.430	0.551	0.669	1.367	5.965	11.706
0.20	0.233	0.307	0.440	0.567	0.690	1.417	6.204	12.182
0.30	0.236	0.314	0.454	0.587	0.717	1.481	6.518	12.807
0.40	0.239	0.321	0.470	0.611	0.749	1.563	6.928	13.626
0.50	0.242	0.329	0.488	0.641	0.790	1.667	7.456	14.684
0.60	0.246	0.338	0.511	0.676	0.838	1.797	8.124	16.027
0.70	0.250	0.349	0.536	0.718	0.897	1.955	8.955	17.698
0.80	0.254	0.361	0.566	0.767	0.965	2.146	9.970	19.744
0.90	0.259	0.374	0.600	0.824	1.046	2.372	11.190	22.209

LAMBDA SEQUENCE : 4 0 1 0 0 3 1

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.248	0.348	0.542	0.734	0.925	2.070	9.687	19.208
0.20	0.247	0.344	0.532	0.717	0.901	1.997	9.284	18.390
0.30	0.247	0.343	0.526	0.706	0.884	1.944	8.981	17.774
0.40	0.247	0.343	0.525	0.702	0.877	1.918	8.816	17.433
0.50	0.248	0.345	0.528	0.706	0.881	1.923	8.821	17.438
0.60	0.249	0.349	0.537	0.719	0.899	1.966	9.033	17.859
0.70	0.252	0.355	0.551	0.743	0.912	2.054	9.485	18.769
0.80	0.255	0.364	0.573	0.778	0.982	2.191	10.214	20.238
0.90	0.259	0.375	0.602	0.827	1.050	2.384	11.254	22.337

LAMBDA SEQUENCE : 2 0 4 2 0 0 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.244	0.335	0.508	0.676	0.842	1.827	8.359	16.520
0.20	0.245	0.338	0.511	0.679	0.845	1.827	8.327	16.447
0.30	0.246	0.341	0.517	0.688	0.856	1.849	8.422	16.631
0.40	0.248	0.345	0.526	0.701	0.874	1.894	8.644	17.073
0.50	0.250	0.350	0.538	0.720	0.899	1.962	8.992	17.773
0.60	0.252	0.355	0.552	0.743	0.932	2.052	9.468	18.730
0.70	0.255	0.362	0.570	0.772	0.973	2.165	10.070	19.946
0.80	0.257	0.370	0.590	0.806	1.021	2.301	10.800	21.419
0.90	0.261	0.379	0.613	0.845	1.076	2.458	11.656	23.150

LAMBDA SEQUENCE : 3 0 3 1 0 1 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.234	0.307	0.435	0.553	0.667	1.334	5.710	11.171
0.20	0.237	0.315	0.453	0.582	0.707	1.437	6.234	12.220
0.30	0.241	0.324	0.473	0.613	0.750	1.551	6.819	13.395
0.40	0.244	0.332	0.493	0.646	0.796	1.675	7.466	14.696
0.50	0.247	0.341	0.515	0.682	0.846	1.810	8.175	16.122
0.60	0.250	0.350	0.538	0.719	0.898	1.955	8.944	17.674
0.70	0.254	0.359	0.561	0.759	0.954	2.110	9.776	19.352
0.80	0.257	0.369	0.586	0.800	1.012	2.276	10.669	21.155
0.90	0.260	0.379	0.612	0.843	1.074	2.452	11.623	23.084

LAMBDA SEQUENCE : 4 0 2 0 0 2 2

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.244	0.335	0.508	0.676	0.842	1.827	8.359	16.520
0.20	0.245	0.338	0.511	0.679	0.845	1.827	8.327	16.447
0.30	0.246	0.341	0.517	0.688	0.856	1.849	8.422	16.631
0.40	0.248	0.345	0.526	0.701	0.874	1.894	8.644	17.073
0.50	0.250	0.350	0.538	0.720	0.899	1.962	8.992	17.773
0.60	0.252	0.355	0.552	0.743	0.932	2.052	9.468	18.730
0.70	0.255	0.362	0.570	0.772	0.973	2.165	10.070	19.946
0.80	0.257	0.370	0.590	0.806	1.021	2.301	10.800	21.419
0.90	0.261	0.379	0.613	0.845	1.076	2.458	11.656	23.150

LAMBDA SEQUENCE : 3 0 4 1 0 0 3

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.248	0.343	0.516	0.680	0.840	1.776	7.929	15.609
0.20	0.250	0.348	0.529	0.703	0.873	1.872	8.453	16.668
0.30	0.252	0.353	0.543	0.726	0.906	1.968	8.976	17.727
0.40	0.253	0.358	0.557	0.749	0.939	2.064	9.499	18.786
0.50	0.255	0.363	0.570	0.773	0.973	2.160	10.022	19.845
0.60	0.257	0.368	0.584	0.796	1.006	2.255	10.546	20.904
0.70	0.259	0.373	0.598	0.819	1.039	2.351	11.069	21.962
0.80	0.260	0.379	0.611	0.842	1.072	2.447	11.592	23.021
0.90	0.262	0.384	0.625	0.866	1.106	2.543	12.116	24.080

LAMBDA SEQUENCE : 4 0 3 0 0 1 3

PROB	0.50	1.00	2.00	GAMMA		10.00	50.00	100.00
				3.00	4.00			
0.10	0.248	0.343	0.516	0.680	0.840	1.776	7.929	15.609
0.20	0.250	0.348	0.529	0.703	0.873	1.872	8.453	16.668
0.30	0.252	0.353	0.543	0.726	0.906	1.968	8.976	17.727
0.40	0.253	0.358	0.557	0.749	0.939	2.064	9.499	18.786
0.50	0.255	0.363	0.570	0.773	0.973	2.160	10.022	19.845
0.60	0.257	0.368	0.584	0.796	1.006	2.255	10.546	20.904
0.70	0.259	0.373	0.598	0.819	1.039	2.351	11.069	21.962
0.80	0.260	0.379	0.611	0.842	1.072	2.447	11.592	23.021
0.90	0.262	0.384	0.625	0.866	1.106	2.543	12.116	24.080